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ABSTRACT

This bibliography, part of the Vocational Education Resource Materials system, is designed to: (1) Encourage and support curriculum development and instructional activities in vocational education and career development through collection and dissemination of appropriate materials, (2) supplement and complement efforts of the (Wisconsin) State Educational Agency staff and School District personnel by identifying needed resources for use in instructional workshops and with other developmental activities, and (3) encourage use of resource materials and services in all appropriate programs of teacher education and staff development (pre-service as well as in-service), and in classroom implementation. Each entry includes a call number, title, series note (not always used), edition statement (not always used), author(s), publisher's name, publisher's address (for ordering purposes), date of publication, pagination, price, grade level (when applicable), and an annotation. Information about the Vocational Education Resource Materials system, and a materials index are included. (SH)

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A BIBLIOGRAPHY OF FREE LOAN MATERIALS FOR

Trade and Industrial Education

Roger H. Lambert
Geraldine E. Strey
Chris M. Olson

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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Third Edition 1976

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University of Wisconsin-Madison

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VOCATIONAL EDUCATORS, STUDENTS AND OTHERS throughout Wisconsin are eligible to borrow materials listed in this bibliography. There are no fees charged for using materials from the Resource Materials Collection.

Managed and staffed by personnel of the Wisconsin Vocational Studies Center and the Educational Instructional Materials Center, University of Wisconsin-Madison, the collection is supported by funds from the Bureau of Career and Manpower Development, Department of Public Instruction, and the Wisconsin Board of Vocational, Technical and Adult Education.

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4. If you want materials not listed in the bibliography, please tell us the title, originator, and/or the specific subject. We'll try to get it for you.
5. Mail all requests and inquiries to:
Wisconsin Vocational Studies Center
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HERE'S WHAT WE DO:

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NOTE:

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EXPLANATION OF THE BIBLIOGRAPHICAL FORMAT

Entries in the bibliography represent an attempt to describe individual items as completely and accurately as possible. The following example identifies the parts of a typical entry.

G-291¹ MATHEMATICS FOR THE SLOW LEARNER. Research report no. 32-A². 1st ed.³ By Emma Brown and Max Witowski. Deseret Publishing House⁶, 1824 Locust St. South, Salt Lake City, UT 84110; 1974⁸. 329 p.⁹ \$19.95¹⁰.

Middle school level.¹¹ "Designed for the culturally and socially disadvantaged student."¹²

1. call number
2. title
3. series note (not always used)
4. edition statement (not always used)

5. author(s)
6. publisher's name
7. publisher's address
8. date of publication (variations: 1973? Almost certainly published in that year; 197-. Published during that decade)
9. pagination
10. price (if price is unknown, left blank)
11. grade level (indicated only when grade level is not apparent from title and only on items added to collection after January 1, 1976)
12. annotation (not always used; when in quotes, a direct quotation from the publication)

ABBREVIATIONS USED IN CATALOGING

b and w black and white; col. colored
comp. compiler(s); ed. edition or editor(s)
et al. and others; l. leaves
mm millimeter; n.d. no date
n.p. no place; p. pages
rev. revised; v. volume(s)

EXPLANATION OF BIBLIOGRAPHIES AND FREE LOAN SYSTEM

WISCONSIN VOCATIONAL STUDIES CENTER

UNIVERSITY OF WISCONSIN-MADISON

PURPOSE - The Vocational Education Resource Materials system has been designed to:

1. Encourage and support curriculum development and instructional activities in vocational education and career development throughout the state through collection and dissemination of appropriate materials on a free loan basis;
2. Supplement and complement efforts of State Educational Agency staff and School District personnel by identifying needed resources for use in instructional workshops and with other developmental activities; and
3. Encourage use of resource materials and services in all appropriate programs of teacher education and staff development (pre-service as well as in-service), and in classroom implementation.

AREAS - Bibliographies exist for each of the following vocational education areas: 1) Agriculture, 2) Business Education, 3) Career Education, 4) Distributive Education, 5) Handicapped and Special Education, 6) Health Occupations, 7) Home Economics, 8) Industrial Education, and 9) Research and Development.

USES - Potential uses for the Bibliographies and the materials borrowed through the system include workshops, student and teacher references, identification of curriculum aids, undergraduate and graduate student references, administrative planning, identification of materials for purchase, and other classroom or instructional uses.

LOAN PROCEDURES - Order forms are enclosed at the end of each bibliography and may be reproduced locally. Anyone wishing to borrow materials can do so by simply stating the item order numbers of the materials desired. Requests will be filled by mail on a first-come, first-served basis. In addition to mail requests, materials are available for examination and loan at the School of Education IMC, located in the Teacher Education Building, 225 N. Mills Street, Madison, WI 53706.

SOURCES OF MATERIALS AND FUNDS - The development of the Bibliographies and free loan system has been made possible through a grant from the Bureau of Career and Manpower Development, Wisconsin Department of Public Instruction, and the cooperation of the Wisconsin Board of Vocational, Technical and Adult Education.

CONTRIBUTION OF MATERIALS - Materials have been identified from throughout the United States. Materials collected as part of the on-going operation of the Wisconsin Vocational Studies Center have been included, as have many items contributed by various departments on the Madison campus and teachers throughout the state. You may wish to contribute items which you have developed in your school. If so, send them or the title and publisher to the Wisconsin Vocational Studies Center. Your suggestions are welcome too.

MATERIALS NOT INCLUDED - the bibliography does not attempt to include materials listed in readily available catalogues produced by commercial sources, government agencies or other agencies which normally supply their lists to teachers. However, some duplications may exist, but attempts have been made to avoid duplicating the ERIC, AIM, ARM, CIJE and other material lists.

DISTRIBUTION OF BIBLIOGRAPHIES - Bibliographies are distributed free to vocational and other selected educators in Wisconsin. Persons out of state or others may purchase the bibliography. Only the bibliography appropriate to the field in which the person works is supplied to an individual. Complete sets of all 9 areas are available through LVEC's at the secondary level and through the Learning Resource Centers and Division Chairmen at the post-secondary level.

PURCHASE PROCEDURE - Items may be purchased, when available, from the supplier or publisher listed in each bibliographic entry. No purchases may be made through the Center.

CODING SYSTEM - A coding system has been designed to facilitate cataloging of materials. The system incorporates Office of Education program code numbers and ERIC identification group numbers and terms. This system allows for a categorical breakdown within each program area.

UPDATES - Periodic update of bibliographies will be made as materials are added to the collection. Updates will be by program area addenda until such time as printing of an entirely new bibliography is warranted.

COMPUTERIZED INFORMATION RETRIEVAL SYSTEM - A computerized information retrieval system which accesses ERIC, AIM, ARM, and CIJE is in operation through the Wisconsin Department of Public Instruction (WIRE) and through local VTA Districts. The computerized system will identify materials and print out titles as well as abstracts. For more information, contact the above agencies or the Wisconsin Vocational Studies Center, University of Wisconsin-Madison. The Computerized Information Retrieval System supplements the bibliography presented here.

REGIONAL CURRICULUM LABORATORY ASSOCIATION - The Center maintains contact with the Regional Curriculum Laboratory for Vocational Education located at Springfield, Illinois, through the Department of Public Instruction and the Wisconsin Board of Vocational, Technical and Adult Education. The Regional Lab provides a backup source of materials as well as a contact for information about new materials being developed throughout the nation. For searches for materials, contact the Wisconsin Vocational Studies Center, University of Wisconsin-Madison or Mr. Cliff Zenor at the Wisconsin Board of Vocational, Technical and Adult Education or Mr. Donald Zahn at the Wisconsin Department of Public Instruction.

SPECIAL SUBJECT AREA LISTINGS - Certain subject areas represented in the bibliographies cut across several program areas; thus it is advisable to look at bibliographies for other program areas as well as your own. In some cases this cross referencing has been done by the Center staff for someone else. If you have a particular need for information which cuts across service areas, such as cooperative education, metric education, work experience, evaluation, etc., you can check with the project staff to see if it has already been completed. A copy will be mailed to you if it is already available; if not, and staff time permits, we will search the collection and compile the list for you.

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION) / 020 ADMINISTRATION

I-15 INDUSTRIAL ARTS EDUCATION: PURPOSES AND PRINCIPLES. Bureau of Industrial Arts Education, The University of the State of New York, The State Education Dept., Albany, NY 12224; 1972. 144 p. Free.

I-16 INDUSTRIAL ARTS EDUCATION: ORGANIZATION AND ADMINISTRATION (EXTRACTED FROM THE SECONDARY SCHOOL CURRICULUM OF NEW YORK STATE HANDBOOK FOR ADMINISTRATORS, 1970). Bureau of Industrial Arts Education, The State Education Dept., Albany, NY 12210; 1970. 5 p. Free.

I-17 A PROGRAM FOR INDUSTRIAL ARTS EDUCATION IN NEW YORK STATE, 1973. Bureau of Industrial Arts, The University of the State of New York, The State Education Dept., Albany, NY 12210; 1973. 4 p. Free.

I-18 WORLD OF DISCOVERY. By Arthur J. Dudley. The University of the State of New York, The State Education Dept., Bureau of Industrial Arts Education, Albany, NY 12210; 1972. 9 p. Free. Reprint of a presentation for directors and supervisors of industrial arts on a fundamental approach to learning.

I-178 RESPONSIBILITIES OF THE EMPLOYEE. Indiana Industrial Cooperative Training Coordinators Summer Workshop. n.p.; 1971.

I-858 MANAGEMENT. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. John Ritz, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d., 18 1. "Junior-middle high school." Cover title: How does management affect industry and society?

I-904 TEACHER LIABILITY IN SCHOOL SHOP ACCIDENTS. By Denis J. Kigin. Pracken Publications, Ann Arbor, MI 48107; 1973. 148 p. \$3.60.

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION) / 040 ATTITUDES

I-899 THE ART OF CRAFTSMANSHIP: AN EXAMINATION OF THE HISTORICAL VALUES WHICH HAVE SHAPED THE AMERICAN SPIRIT. By Philip Trupp. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1969. 71 p. \$1.95.

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION) / 050 AUDIO-VISUAL MATERIALS AND METHODS

I-154 RESEARCH OF AFFECT OF VISUAL MATERIALS IN MANUFACTURING PROCESS ON LEARNING. By Lew Mallow and Ralph Munger. District One Technical Institute, Eau Claire, WI; 1974. 25 p.

I-616 METRIC FILMSTRIPS. Library Filmstrip Center, 3033 Alma, Wichita, KS 67211; 1974. 5 35mm filmstrips, 5 cassette tapes. \$23.00. CONTENTS: SI: Temperature.-Metric weights and measure.-SI: Length and area.-SI: Volume and mass.-Survey of modernized metric.

I-664 SAFETY IN THE SHOP--GENERAL. Shop safety series. Doubleday Multimedia, Box 11607, 1371 Reynolds Ave., Santa Ana, CA 92705; 1975. 35 mm col. filmstrip, cassette tape. One of a set of six costing \$125.00. For others in the set, see Items I-665 (17.03 050), I-666 (17.36 050), I-667 (17.15 050), I-668 (17.23 050), I-669 (17.2302 050).

I-855 ELEMENTS OF INDUSTRY: TRANSPARENCY LAYOUTS. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. Developed by Heather Wentling. Industrial Education Instructional Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d.

I-884 DECIMAL AND METRIC EQUIVALENTS. Ten Point Products, Inc., Coloma, MI 49018; n.d. Wall chart, 46x52 cm. Free.

I-885 INDUSTRY IN 20TH CENTURY AMERICA. Produced by Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, IL 60614; 1972. 5 filmstrips, 1 cassette tapes, 5 teacher's guides/reading scripts. 35x75. CONTENTS: Industrial engineering.-Production engineering.-Plant engineering.-Manufacturing.-Quality control.

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION) / 080 COMMUNICATION

I-859 COMMUNICATIONS. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. John Ritz, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 15 1. "Junior-middle high school."

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION) / 110 CURRICULUM

I-14 STUDY GUIDE D-6. EFFECTIVE TEACHING OF SAFETY (SELECTION AND ORGANIZATION OF SUBJECT MATTER IN TRADE AND INDUSTRIAL EDUCATION). Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1969. 17 p. \$5.0.

I-120 EARLY SECONDARY INDUSTRIAL ARTS: AN INSTRUCTIONAL GUIDE (WOODS, CERAMICS, DRAWING, PLASTICS, METALS, GRAPHIC ARTS, ELECTRICITY, POWER MECHANICS). Bureau of Secondary Curriculum Development, The University of the State of New York, The State Education Dept., Albany, NY 12224; 1967. 147 p. Free.

I-121 EARLY SECONDARY INDUSTRIAL ARTS: AN INSTRUCTIONAL GUIDE. Bureau of Secondary Curriculum Development, The University of the State of New York, The State Education Dept., Albany, NY 12224; 1967. 6 p. Free.

I-122 SECONDARY INDUSTRIAL ARTS: AN INSTRUCTIONAL PLANNING GUIDE. Bureau of Industrial Arts, The University of the State of New York, The State Education Dept., Albany, NY 12224; 1973. 12 p. Free.

I-130 A GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. Robert S. Swanson, ed. Wisconsin Dept. of Public Instruction, Madison, WI; n.d. 45 p.

I-131 A GUIDE TO OKLAHOMA VOCATIONAL AND TECHNICAL EDUCATION. Curriculum and Instructional Materials Center, Oklahoma State Dept. of Vocational and Technical Education, 1515 West 6th St., Stillwater, OK 74074; n.d. 36 p.

I-132 A GUIDE FOR USE IN DEVELOPING TRAINING PROGRAMS IN MECHANICAL TECHNOLOGY. Curriculum Laboratory, Trade and Technical Education, Jackson, MS. Located in the Dept. of Industrial Education, Mississippi State University, State College, MS; 1966. 228 p.

I-133 HANDBOOK FOR VOCATIONAL AND TECHNICAL EDUCATION. Div. of Vocational and Technical Education, 222 W. Pleasant Dr., Pierre, SD 57501; 1973. 65 p.

I-134 INDUSTRIAL ARTS INTEGRATED ENVIRONMENTAL EDUCATION GUIDES, GRADES 7-12. n.p.; n.d. 20 p.

I-136 MECHANICAL TECHNOLOGY: DESIGN AND PRODUCTION, A SUGGESTED 2-YEAR POST HIGH SCHOOL CURRICULUM. US Dept. of Health, Education and Welfare, Office of Education, US Govt. Print. Off., Washington, DC 20402; n.d. 102 p. \$1.00.

I-137 THE PROGRAM OF INDUSTRIAL ARTS EDUCATION IN KENTUCKY. Dept. of Education, Capitol Plaza Tower, Rm 2137, Frankfort, KY 40601; n.d. 156 p.

I-138 ORIENTATION TO I.C.T. Indiana Industrial Cooperative Training Coordinators Summer Workshop. n.p.; 1971. 30 p.

I-139 PLANNING FOR PROGRAMS IN VOCATIONAL TECHNICAL EDUCATION IN SECONDARY SCHOOLS: A HANDBOOK FOR LOCAL ADMINISTRATORS. By James L. Patton. Research and Curriculum Unit, Mississippi State University in cooperation with State Dept. of Education, Div. of Vocational and Technical Education, Jackson, MS. 1970; n.d. 207 p.

I-140 STUDYING AND TAKING TESTS. Indiana Industrial Cooperative Training Coordinators Summer Workshop. n.p.; 1971. 10 p.

I-141 TRADE AND INDUSTRIAL EDUCATION: TEACHER'S HANDBOOK. By Elwyn G. Wheat and B.C. Messer. n.p.; n.d. 163 p.

I-142 VOCATIONAL AGRICULTURE EDUCATION: BASIC CORE CURRICULUM I. By Bob Patton and Clifton R. Baker. Oklahoma State Board of Vocational and Technical Education, Stillwater, OK 74074; n.d. 300 p.

I-143 VOCATIONAL EDUCATION CURRICULUM DEVELOPMENT HANDBOOK: A HANDBOOK FOR VOCATIONAL CURRICULUM DEVELOPERS, MANAGERS AND SUPERVISORS. By Milton Larson and Ivan Valentine. Dept. of Vocational Education, Colorado State University, Fort Collins, CO 80521; n.d. 17 p.

I-145 VOCATIONAL EDUCATION STATE INSTRUCTIONAL MATERIALS FOR TRADE AND INDUSTRIAL OCCUPATIONS. US Govt. Print. Off., Washington, DC 20402; n.d. 108 p.

I-146 THE WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. Wisconsin Dept. of Public Instruction, Madison, WI 53706; n.d. 25 p.

I-278 POWER AND PRIDE. Detroit Diesel Allison, Div. of General Motors Corp., 13400 W. Outer Dr., Detroit, MI 48228; n.d. 20 p.

I-304 INDUSTRIAL COOPERATIVE EDUCATION: OPERATIONAL GUIDELINES. By Gerald DeLeeuw and Donald Strube. Dept. of Elementary and Secondary Education, Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Vliet St., Milwaukee, WI 53208; 1972. 48 p.

I-314 EXPLORING THE INDUSTRIES: FOR THE GENERAL SHOP AND LABORATORY OF INDUSTRIES. 3rd ed. By Chris H. Groneman. Steck-Vaughn Co., Austin, TX; 1973. 266 p. \$2.25. True-False test included.

I-349* EXPLORING THE INDUSTRIES FOR THE GENERAL SHOP AND LABORATORY OF INDUSTRIES. Rev. By Chris H. Groneman. Steck-Vaughn Co., Austin, TX; 1973. 218 p.

I-449* ORIENTATION TO INDUSTRIAL COOPERATIVE TRAINING. State of Indiana, Dept. of Public Instruction, Indianapolis, IN 46204; n.d. 12 p.

I-479 GENERAL MECHANICAL: STUDENT MATERIAL. By W. Charles Henderson, Bob Patton and Margaret Spann. Curriculum and Instructional Materials Center, State Dept. of Vocational and Technical Education, Stillwater, OK 74074; 1973. 600 p. \$4.50.

I-483 GENERAL MECHANICAL TRADES: A CURRICULUM GUIDE. Rev. By Charles W. Henderson, Bob Patton and Margaret Spann. Coordinated Vocational Education and Training, Oklahoma State Board of Vocational and Technical Education, Stillwater, OK 74074; 1973. 600 p. \$10.00.

I-515 INDUSTRIAL COOPERATIVE TRAINING I: CURRICULUM GUIDE. Div. of Vocational and Technical Education, College of Education, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, and Div. of Vocational Education, State Dept. of Education, Richmond, VA 23216; 1974. 429 p. \$5.00.

I-541 CURRICULUM DEVELOPMENT IN TRADE AND INDUSTRIAL AND TECHNICAL EDUCATION. By Gordon G. McMahon. Charles E. Merrill Publishing Co., Columbus, OH; 1974. 134 p. \$7.95.

I-576 INDUSTRIOLOGY--THE SCIENCE OF INDUSTRY. Industriology Project, University of Wisconsin-Platteville, Platteville, WI 53818; n.d. 5 v. CONTAINS: 1. Industriology--the science of industry. 2. Development and structure of industry: information and job sheets. 3. Development and structure of industry: study guide. 4. Development and structure of industry: instructional aids list and bibliography. 5. Development and structure of industry: teaching plan and activity plan sheet. Elementary level.

I-623 INDUSTRIAL ARTS CURRICULUM GUIDE. Industrial Arts Education Service, Div. of Vocational Education, Virginia State Dept. of Education, Richmond, VA 23216; 1972. 109 p. \$2.50.

I-900 CURRICULUM GUIDE FOR INDUSTRIAL ARTS, GRADES 9, 10, 11 OR 12: MATERIALS AND PROCESSES OF INDUSTRY. Louisiana State Dept. of Education, P.O. Box 44064, Capitol Station, Baton Rouge, LA 70804; 1974. 141 p.

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION)/ 130 DEVELOPMENT

I-653* INDUSTRIAL EDUCATION IN MINNESOTA: A GUIDE FOR ELEMENTARY AND SECONDARY PROGRAM DEVELOPMENT. State Dept. of Education, Div. of Vocational-Technical Education, 550 Cedar St., St. Paul, MN 55101; 1973. 32 p.

I-827 NORTH DAKOTA SUGGESTED MASTER PLAN FOR INDUSTRIAL ARTS. By the Master Plan Committee. State Board for Vocational Education, 900 E. Boulevard Ave., Bismarck, ND 58506; 1975. 12 p.

I-834 A PLAN FOR A COMPREHENSIVE INDUSTRIAL ARTS PROGRAM IN NORTH CAROLINA. North Carolina State Dept. of Public Instruction, Raleigh, NC; 197-. (10) p.

I-838 SELECTED REFERENCES AND RESOURCES FOR DESIGNING CONTEMPORARY INDUSTRIAL EDUCATION PROGRAMS. James M. Benson, comp. Industrial Education Program, 115 Technology Bldg., University of Wisconsin-Stout, Menomonie, WI, reproduced and disseminated by Wisconsin Dept. of Public Instruction, 126 Langdon St., Madison, WI 53702; 1975. 19 p. Mimeograph.

I-850 PLANNING AND ACCOUNTABILITY FOR THE 70'S. By Arthur J. Dudley. University of the State of New York, The State Education Dept., Albany, NY 12224; 1971. 6 p.

I-889 THE MARYLAND PLAN: THE JUNIOR HIGH SCHOOL PROGRAM IN INDUSTRIAL ARTS. By W. Harley Smith. University of Maryland, Dept. of Industrial Education, College Park, MD; 1970. 30 p.

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION)/ 140 EDUCATION

I-3 IN-SERVICE EDUCATION (TRADE AND INDUSTRIAL EDUCATION). Instructor guide A-2. Instructional Materials Laboratory, Ohio State University, 1885 Neil Ave., Columbus, OH 43210; 1973. 1 v.

I-5 STUDY GUIDE D-7: DEVELOPING AND CONSTRUCTING TEACHING AIDS (SELECTION AND ORGANIZATION OF SUBJECT MATTER IN TRADE AND INDUSTRIAL EDUCATION). Trade and Industrial Education Service, Instructional Materials Laboratory, 1885 Neil Ave., Ohio State University, Columbus, OH 43210; 1968. 27 p. \$.75.

I-7 STUDY GUIDE 44: METHODS OF KEEPING UP-TO-DATE IN THE TRADE. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Columbus, OH 43210; 11 p. \$.50.

I-8 STUDY GUIDE 43: APPROVED SUPPLEMENTAL WORK EXPERIENCE. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Columbus, OH 43210; n.d. 7 p. \$3.50.

I-9 STUDY GUIDE 40: EQUIPMENT SELECTION, TRADE TECHNOLOGY LABORATORY DESIGN AND LAYOUT. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Columbus, OH 43210; n.d. 16 p. \$3.50.

I-11 STUDY GUIDE 39: EQUIPMENT SELECTION, SHOP DESIGN AND LAYOUT. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Columbus, OH 43210; n.d. 8 p. \$3.50.

I-12 STUDY GUIDE 13: TECHNIQUES OF DEVELOPING TRADE SKILLS IN STUDENTS. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Columbus, OH 43210; n.d. 10 p. \$3.50.

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I-112 TRANSPARENCY MASTER SET FOR USE WITH INDUSTRIAL COOPERATIVE TRAINING GENERAL RELATED STUDY UNITS. n.p.; n.d.

I-113 POLICIES AND STANDARDS OF QUALITY RELATING TO THE INITIATION AND OPERATION OF TRADE AND INDUSTRIAL EDUCATION PROGRAMS IN VIRGINIA. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Richmond, VA 23216; 1973. 120 p.

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I-117 CHARACTER DEVELOPMENT: PERSONALITY AND HUMAN RELATIONS. Indiana Industrial Cooperative Training Coordinators Summer Workshop. n.p.; 1971. 16 p.

I-125 HANDBOOK FOR VOCATIONAL INDUSTRIAL EDUCATION SHOP TEACHERS. Vocational Instructional Services, Vocational Industrial Education, Texas A & M University, Box 182, College Station, TX 77843; 1972. 147 p. \$2.90.

I-155 VOCATIONAL EDUCATION: STATE INSTRUCTIONAL MATERIALS FOR TECHNICAL EDUCATION. US Govt. Print. Off., Washington, DC 20402; n.d. 18 p.

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I-157 ELEMENTARY SCHOOL INDUSTRIAL ARTS: CLASSROOM AND LABORATORY. By Carl Gerbracht and Robert J. Babcock. The Bruce Publishing Co., 2642 University Ave., St. Paul, MN 54114; 1969. 536 p.

I-269 DIRECTORY OF INDUSTRIAL ARTS EDUCATION, 1972-73. Richard P. Callan, Jonathan Conwell and William R. Smith, eds. New Jersey Dept. of Education, Div. of Vocational Education, 225 W. State St., Trenton, NJ 08625; n.d. 54 p.

I-432* TRAINING IN BUSINESS, INDUSTRY AND GOVERNMENT. The Educational Technology Review series, no. 12. Educational Technology Publications, Englewood Cliffs, NJ 07632; n.d. 134 p.

I-453 EXPLORING CAREERS IN INDUSTRY. By Wilbur R. Miller, Marion E. Maddox and Laven B. Smith. McKnight Publishing Co., Bloomington, IL; 1975. 412 p.

I-540 INTRODUCTION TO TRADE, INDUSTRIAL AND TECHNICAL EDUCATION. By Merle E. Strong and Carl J. Schaefer. Charles E. Merrill Publishing Co., Columbus, OH; 1975. 265 p. \$12.95.

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I-622 GEOGRAPHY OF WISCONSIN MANUFACTURING. 4th ed. By Philip Sundal and Richard Kottenbeutel. Wisconsin Div. of Economic Development, 123 W. Washington Ave., Madison, WI 53702; 1970. 88 p.

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I-833 LEADERSHIP CONFERENCE FOR TRADE AND INDUSTRIAL SUPERVISORS AND COORDINATORS. By Ray Hansen and Jerry Coomer. Center for Vocational, Technical and Adult Education, University of Wisconsin-Stout, Menomonie, WI 54751; 1975. 1 v. (various pagings).

I-832 SENIOR HIGH WORKSHOP (499-E). A SUMMER WORKSHOP FOR THE CONTEMPORARY STUDY OF TECHNOLOGY. University of Maryland, Dept. of Industrial Education, College Park, MD; 1972. 168 p.

I-831 CAREER DEVELOPMENT CURRICULUM FOR INDUSTRIAL EDUCATION TEACHERS. By F. Marion Asche and W. Wesley Tennyson. Div. of Instruction, Pupil Personnel Services Section, Minnesota Dept. of Education, St. Paul, MN 55101; 1974. 55 p. \$2.50. Junior high level.

I-836 EXPLORATORY GUIDELINES (TRADE AND INDUSTRIAL EDUCATION). Connecticut State Dept. of Education, Box 2219, Hartford, CT 06115; n.d. 1 v. (various pagings).

I-839 PHILOSOPHICAL BASE FOR INDUSTRIAL ARTS. By Michael J. Pierson. Texas Industrial Arts Curriculum Study, Southwest Texas State University, San Marcos, TX 78666; 1974. 17 p.

I-840 AN ERA OF CHANGE: INDUSTRIAL ARTS EDUCATION. By Jarvis Baillargeon. University of the State of New York, State Education Dept., Albany, NY 12224; 1972. 8 p.

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I-842 THE RELATIONSHIP BETWEEN INDUSTRIAL ARTS AND OCCUPATIONAL EDUCATION. By Arthur J. Dudley. State Education Dept., Bureau of Industrial Arts Education, Albany, NY 12224; n.d. 7 p. Presented at the Phi chapter meeting of Epsilon Pi Tau, Oswego, New York, May, 1971.

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I-847 CHANGE IS THE NAME OF THE GAME. By Arthur J. Dudley. University of the State of New York, State Education Dept., Albany, NY 12224; n.d. 5 p. Presented at a joint meeting of the Nassau and Suffolk County Industrial Arts Teachers' Assns., October, 1975.

I-849 INDUSTRIAL ARTS IN ELEMENTARY SCHOOLS. By Jarvis H. Baillargeon. University of the State of New York, State Education Dept., Bureau of Industrial Arts, Albany, NY 12224; 197-. 6 p.

I-856 THE ENTERPRISE. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. John Ritz, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 28 l. "Middle-junior high school."

I-857 MASS PRODUCTION ACTIVITIES. Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 10 p. "Junior-senior high school."

I-860 LAB MAINTENANCE PLAN DEVELOPMENT. Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Industrial Education Instructional Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 3 l. "For experienced students of grades 11 or 12."

I-861 POWER AND ENERGY. Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Industrial Education Instructional Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 1 v. (various pagings). Middle-junior high school.

I-862 HUMAN RESOURCES. Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Industrial Education Instructional Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 1 v. (various pagings). "Middle-junior high school."

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I-160 WISCONSIN MANPOWER REPORT: FIRST CLASS. Dept. of Industry, Labor and Human Relations, Madison, WI; n.d. 25 p.

I-448* RESPONSIBILITIES OF THE EMPLOYEE, VOCATIONAL EDUCATION, TRADE INDUSTRIAL TECHNICAL EDUCATION. State of Indiana, Dept. of Public Instruction, Indianapolis, IN 46204; n.d. 10 p.

I-906 MOBILITY STUDY OF INDUSTRIAL ARTS TEACHER EDUCATION GRADUATES: PATTERNS OF EMPLOYMENT, EDUCATION, AND SELECTED CHARACTERISTICS. University of the State of New York, State Education Dept., Bureau of Industrial Arts Education, Albany, NY 12224; 1975. 19 p.

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION)/ 170 EQUIPMENT

I-267 SECONDARY INDUSTRIAL ARTS TOOLS AND EQUIPMENT. By Arthur J. Dudley. The University of the State of New York, The State Education Dept., Bureau of Industrial Arts Education, Albany, NY 12224; 1974. 33 p.

I-367* MINIMUM-MAXIMUM EQUIPMENT LIST FOR PROGRAMS 17.0100 - 17.3601. n.p.; n.d.

I-846 EARLY SECONDARY INDUSTRIAL ARTS TOOLS AND EQUIPMENT: CERAMICS, WOODS, DRAWING, PLASTICS, METALS, GRAPHIC ARTS, ELECTRICITY, POWER MECHANICS. Jarvis H. Baillargeon, comp. University of the State of New York, State Education Dept., Bureau of Industrial Arts Education, Albany, NY 12224; 1974. 20 p.

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I-152 EVALUATION OF CIVIL STRUCTURAL CURRICULUM IN TERMS OF RATINGS BY EMPLOYERS AND TECHNICIANS. By Lehmen Larson and Raymond Loer. District One Technical Institute, Eau Claire, WI; 1974. 75 p. Mimeograph.

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I-451* INDUSTRIAL ARTS BASIC TOOL AND EQUIPMENT LIST. State Dept. of Public Instruction, 126 Langdon St., Madison, WI 53702; n.d. 18 p.

I-848 INDUSTRIAL ARTS FACILITY PLANNING GUIDE. By Jarvis H. Baillargeon. University of the State of New York, State Education Dept., Bureau of Industrial Arts Education, Albany, NY 12224; n.d. 15 p.

I-887 A GUIDE FOR PLANNING INDUSTRIAL ARTS FACILITIES. Bulletin 701. Texas Education Agency, 201 E. 11th St., Austin, TX 78701; 1970. 41 p. \$1.00.

I-903 A GUIDE TO PREPARING EDUCATIONAL SPECIFICATIONS FOR SECONDARY INDUSTRIAL ARTS FACILITIES. Monograph 1. By Ralph V. Steeb. American Council of Industrial Arts Supervisors, Capitol Complex, Bldg. B, Rm B-138, Charleston, WV 25305; 1974. 36 p. \$2.50.

I-905 MODERN SCHOOL SHOP PLANNING. 6th ed. Praken Publications; 416 Longshore Dr., P.O. Box 623, Ann Arbor, MI 48107; 1971. 285 p. \$5.50.

17.00 INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION)/ 250 HEALTH AND SAFETY

I-373* SAFETY IN TRADE AND INDUSTRIAL AND TECHNICAL EDUCATION. By John C. Thomas. Curriculum Development Center, Vocational Education, University of Kentucky, Lexington, KY 40506; 1974. 100 p.

I-625 C.A.G.I. STANDARD SAFETY CODE FOR PORTABLE AIR TOOLS. Compressed Air and Gas Institute, 2130 Keith Bldg., Cleveland, OH 44115; 1974. 35 p. \$2.00.

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I-6 ORGANIZING AND CONDUCTING EFFECTIVE DEMONSTRATIONS (TEACHING METHODS AND TECHNIQUES IN TRADE AND INDUSTRIAL EDUCATION). Instructor guide C-4. Instructional Materials Laboratory, Ohio State University, Columbus, OH 43210; 1973. 41 p. \$.75.

- I-147 CONFERENCE PROCEEDINGS: FIFTH NATIONAL INSTRUCTIONAL ASSESSMENT CONFERENCE ON IMPLICATIONS OF INNOVATION IN INSTRUCTION. By W. Beecher and L. Cantata. Waukesha County Technical Institute, Pewaukee, WI 53072; n.d. 25 p.
- I-148 LEVELS AND SIMILARITIES OF INSTRUCTION IN SELECTED CONTENT AREAS OF VOCATIONAL EDUCATION, REPORT 8030, RESEARCH SERIES 1. By Aspyr S. Lee. Research Coordinating Unit for Vocational Technical Education, College of Education, in cooperation with Div. of Vocational and Technical Education, Mississippi State Dept. of Education, Jackson, MS; 1971. 74 p.
- I-149 SUPERVISED TEACHING OF VOCATIONAL SUBJECTS: STUDENT MANUAL. By Elaine House, Melvin M. Spencer, and Benjamin Verdile. State of New Jersey, Dept. of Education, Div. of Vocational Education, Rutgers-The State University, Ridge, 103 Kilmer Campus, New Brunswick, NJ 08903; 1972. 62 p.
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- I-555 A HANDBOOK FOR INDUSTRIAL COOPERATIVE TRAINING COORDINATORS. By Wiley Mauldin. Eastern New Mexico University, Portales, New Mexico Dept. of Education, Vocational Div., Santa Fe, NM; 1973. 110 p. 28 cm. \$2.50.
- I-557 PERFORMANCE OBJECTIVES DEVELOPMENT PROJECT: TECHNICAL EDUCATION. By Dan Brown and Philip Bailey. Michigan Dept. of Education, Vocational-Technical Education Service, P.O. Box 928, Lansing, MI 48904; 1974. 150 p. 28 cm.
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- I-835 GUIDE: DEFENSE EQUIP. Prepared by the Connecticut State Equip. Council. Connecticut State Dept. of Education, Box 2219, Hartford, CT 06115; 1970. 29 p.
- I-851 EXAMPLES OF SUB-OBJECTIVES AND LEARNING TASKS APPROPRIATE TO FIELD OBJECTIVES STATED IN THE GUIDE. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. Lawrence S. Wright, contrib. Industrial Education Instructional Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 10 l. Primary level.
- I-852 OVERVIEW OF THE CAPSTONE PROGRAM. Prepared as an aid in implementing the WISCONSIN GUIDE. James Walker, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 14 l. Secondary level.
- I-855 EXAMPLE ELEMENTARY UNIT. Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Industrial Education Instructional Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 29 l. "Lower elementary grades."
- I-854 CAREER PLANNING. Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Catherine Faray, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 8 l. "Senior high school."
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- I-864 PAPER AIRPLANE CONTEST. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Rob Fieldman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 2 l.
- I-865 MOUSETRAP VEHICLE. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Rob Fieldman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 2 l.
- I-866 METRICATION. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Rob Fieldman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 4 l.
- I-867 THE MULTI SYSTEM ENCAPSULATOR. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Rob Fieldman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 1 l. High school level.
- I-868 LET'S MAKE A YO-YO. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. John Ritz, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 5 l.
- I-869 LET'S MAKE A WALL HANGING. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. John Ritz, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 2-1.
- I-870 LET'S MAKE A KITE. Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. James Walker, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 23 l. Middle school level.
- I-871 LET'S MAKE A HAND FISHING REEL. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. John Ritz, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 4 l.
- I-872 LET'S DESIGN A RECREATIONAL GAME. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. John Ritz, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 3 l.
- I-873 LET'S CONSTRUCT A CATAPULT. Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Thomas Burt, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 2 l.

I-874 **LET'S BUILD AN ELEVATOR.** Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Thomas Burt, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 31.

I-875 **MAROOINED IN THE PAST.** Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Rob Fieldman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 11.

I-876 **FUTURE COMMUNITY DESIGN.** Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Rob Fieldman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 21.

I-877 **EARLY LUMBERING.** Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Strand Wedel, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 151. "High school."

I-878 **EGG CRAFT.** Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Rob Fieldman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 11. High school.

I-879 **COMPRESSED AIR PROPULSION.** Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Rob Fieldman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 21.

I-880 **THE CO-OP PROGRAM: EARN WHILE YOU LEARN.** Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Allen LeJenneman, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 211. "Grade 12."

I-881 **DESIGNING A MOBILE.** Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. John Ritz, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 31.

I-882 **THE ELECTRO-MAGNETIC CRANE.** Problem solving activities prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Thomas Burt, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 31.

I-883 **WHAT IS PROPERTY?** Prepared as an aid in implementing the WISCONSIN GUIDE, K-12. Industrial Education Instructional Materials Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 1 v. (various pagings).

I-890 **A RESOURCE GUIDE FOR THE MARYLAND PLAN GROUP PROJECT AND LINE PRODUCTION.** By Gerald F. Day. Dept. of Industrial Education, University of Maryland, College Park, MD; 1975. 67 p.

I-893 **STANDARDS AND FORMATS FOR INDUSTRIAL INSTRUCTIONAL MATERIALS.** Rev. Vocational Instructional Services, Texas A & M University, College Station, TX 77843; 1972. 149 p. \$2.85.

I-896 **CAREERS IN MANUFACTURING (LANGUAGE ARTS).** Rev. By Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. 32, 33 p. \$1.00. "Recommended for use in grades 7-12."

I-897 **INTRODUCTION TO TEACHING APPRENTICES.** By Leo Meyer. California State Dept. of Education, Bureau of Industrial Education, Sacramento, CA 95814; 1975. 20 p.

I-898 **GUIDE TO INDUSTRIAL TEACHING.** By Joseph J. Littlell. (Charles A. Bennett Co., Inc., 809 Betweiller Dr., Peoria, IL 61614; 1966, 1970. 192 p. \$8.00.

I-901 **INDUSTRIAL ARTS FOR THE ELEMENTARY CLASSROOM: LEARNING THROUGH HANDWORK.** By Marion L. Swierkos and Catherine G. Morse. Charles A. Bennett Co., 809 Betweiller Dr., Peoria, IL 61614; 1973. 375 p. \$4.50.

I-902 **INDUSTRIAL ARTS RESOURCE SUPPLEMENT TO THE CONSUMER EDUCATION CURRICULUM GUIDE FOR OHIO.** Ohio State Board of Education, 612 State Office Bldg., Columbus, OH 43215; 1971. 116 p. \$2.80.

17.00 **INDUSTRIAL OCCUPATIONS EDUCATION (GENERAL INFORMATION)/ 320 LIBRARY MATERIALS**

I-353* **INDUSTRIAL ARTS EDUCATION FROM AIM, 1967-1971.** The Center for Vocational and Technical Education, The Ohio State University, 1960 Kenny Rd., Columbus, OH 43210; 1972. 97 p.

I-378* **STATE INSTRUCTIONAL MATERIALS FOR TRADE AND INDUSTRIAL OCCUPATIONS VOCATIONAL EDUCATION.** Supt. of Documents, #892, US Govt. Print. Off., Washington, DC 20402; 1974. 72 p.

I-431* **TRADE JOURNALS SUITABLE FOR USE IN VOCATIONAL TRADE AND INDUSTRIAL EDUCATION.** Instructional Materials Laboratory, Trade and Industrial Education, Indiana State College, Terre Haute, IN; n.d. 15 p.

I-577* **SUGGESTED LIBRARY GUIDE FOR TECHNICAL EDUCATION PROGRAMS.** n.p.; 1963. 4 p.

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I-166 **METRIC PRACTICE GUIDE.** American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103; n.d. 34 p.

I-167 **U.S. METRIC STUDY INTERIM REPORT FEDERAL GOVERNMENT.** Civilian Agencies, US Dept. of Commerce; US Govt. Print. Off., Washington, DC 20402; 1971. 312 p.

I-168 **WHAT ABOUT METRIC?** US Dept. of Commerce/ National Bureau of Standards. n.p.; n.d. 16 p.

I-169 **A GUIDE TO THE METRIC SYSTEM.** By Gary G. Hansen. Indiana State Board of Vocational and Technical Education in cooperation with Purdue University, Lafayette, IN; n.d. 15 p.

I-170 **THE INTERNATIONAL SYSTEM OF UNITS (SI).** By Chester H. Page and Paul Vigoureux. National Bureau of Standards Special Publication 330, US Govt. Print. Off., Washington, DC 20402; 1972. 42 p. \$30.

I-171 **PREPARE NOW FOR A METRIC FUTURE.** By Frank Donovan. Weybright and Talley, New York, NY 10017; 1970. 212 p.

I-652* **PILOT MATHEMATICS PROJECT: FUNDAMENTAL MATH FOR TECHNICAL VOCATIONAL TRAINING.** St. Paul Technical Vocational Institute, Instructional Div., St. Paul, MN; n.d. 483 p.

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I-124 **SPONSORING A VOCATIONAL INDUSTRIAL CLUB.** Instructor guide E-5. Instructional Materials Laboratory, Ohio State University, 1885 Neil Ave., Columbus, OH 43210; 1970. 24 p. \$7.75.

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I-462 AIR CONDITIONING AND REFRIGERATION SYSTEMS. ALLIED. By Arthur J. Brown. Technical Training Center, Industrial Training Center, Dept. of Education, Arts and Sciences, Division of Vocational Education, University of Mississippi, University, Miss., in cooperation with the Federal Educational Resources Project, State Dept. of Education, Jefferson City, Mo., 1973. 200 p. 1973.

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I-465 PRACTICAL ELECTRICITY IN REFRIGERATION AND AIR CONDITIONING. PART II. By David L. Davis. Vocational Technical Curriculum Laboratory, Rutgers-The State University, RIDg 4103 Ellner Campus, New Brunswick, NJ, 1973. 200 p. 1973.

I-466 PRACTICAL ELECTRICITY IN REFRIGERATION AND AIR CONDITIONING. PART I. By David L. Davis. Vocational Technical Curriculum Laboratory, Rutgers-The State University, RIDg 4103 Ellner Campus, New Brunswick, NJ, 1973. 200 p. 1973.

12.01 AIR CONDITIONING/ 270 INSTRUCTION

I-465 AIR CONDITIONING, ELECTRICAL CONTROL. CURRICULUM SUPPLEMENT. California State Dept. of Education, Bureau of Industrial Education, 221 Capitol Mall, Sacramento, CA 95814, 1975. 2 v. CONTAINS: 1. Workbook. 2. Textbook. Post-secondary level.

12.01 AIR CONDITIONING/ 300 OCCUPATION

I-466 AN ANALYSIS OF THE AIR CONDITIONING, REFRIGERATION, AND HEATING OCCUPATIONS. By Melvin P. Gross and Mackay Deane. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210, 1975. 1975 p.

12.01.02 HEATING/ 110 CURRICULUM

I-467 HEAT TREATMENT FUNDAMENTALS. UNIT 211 420. By The Valley Technical Institute, 1925 N. Bluewood Dr., Appleton, WI 54911. n.d. 7 p.

I-468 INTRODUCTION TO ROCKET OPERATION. A FIRST YEAR TEXT. By William F. Green. Vocational Technical Curriculum Laboratory, Rutgers-The State University, RIDg 4103 Ellner Campus, New Brunswick, NJ, 1973. 87 p. 1973.

12.01.02 HEATING/ 270 INSTRUCTION

I-469 APPLIED SCIENCE BUILDING ENERGY SYSTEMS. Individual teaching pak. Suburban Hennepin County Area Vocational Technical Centers, District 282, 1820 Zenon Lane, Minneapolis, MN 55441, 1976. 171 p.

12.02 APPLIANCE REPAIR/ 000 CURRICULUM

I-470 KNOW A VOCABULARY CARD FOR THE APPLIANCE REPAIR TRADE. By Clement O. Froth. Vocational Technical Curriculum Laboratory, Rutgers-The State University, RIDg 4103 Ellner Campus, New Brunswick, NJ 08903, 1976. 33 p. 1976.

12.02 APPLIANCE REPAIR/ 110 CURRICULUM

I-471 CURRICULUM DESIGN FOR SERVICE STATION TECHNICIANS. By David L. Davis. Technical Training Center, Industrial Training Center, Dept. of Education, Arts and Sciences, Division of Vocational Education, University of Mississippi, University, Miss., in cooperation with the Federal Educational Resources Project, State Dept. of Education, Jefferson City, Mo., 1973. 200 p. 1973.

I-472 ELECTRICAL APPLIANCE SERVICE MAN. SMALL REPAIRS. By David L. Davis. Technical Training Center, Industrial Training Center, Dept. of Education, Arts and Sciences, Division of Vocational Education, University of Mississippi, University, Miss., in cooperation with the Federal Educational Resources Project, State Dept. of Education, Jefferson City, Mo., 1973. 200 p. 1973.

12.02 APPLIANCE REPAIR/ 270 INSTRUCTION

I-473 AUTOMATIC WASHERS: OPERATION, DIAGNOSIS, REPAIR. By David L. Davis. Technical Training Center, Industrial Training Center, Dept. of Education, Arts and Sciences, Division of Vocational Education, University of Mississippi, University, Miss., in cooperation with the Federal Educational Resources Project, State Dept. of Education, Jefferson City, Mo., 1973. 200 p. 1973.

I-474 BASIC ELECTRICITY FOR APPLIANCES. 260 ed. By David L. Davis. Technical Training Center, Industrial Training Center, Dept. of Education, Arts and Sciences, Division of Vocational Education, University of Mississippi, University, Miss., in cooperation with the Federal Educational Resources Project, State Dept. of Education, Jefferson City, Mo., 1973. 200 p. 1973.

I-475 ELECTRICIDAD BASICA PARA APARATOS CASEROS. By David L. Davis. Technical Training Center, Industrial Training Center, Dept. of Education, Arts and Sciences, Division of Vocational Education, University of Mississippi, University, Miss., in cooperation with the Federal Educational Resources Project, State Dept. of Education, Jefferson City, Mo., 1973. 200 p. 1973.

12.02 APPLIANCE REPAIR/ 300 OCCUPATION

I-476 YOUR CAREER AS AN APPLIANCE SERVICE TECHNICIAN. Assn. of Home Appliance Manufacturers, 29 N. Wacker Dr., Chicago, IL 60606; n.d. (13) p. Free.

12.03 AUTOMOTIVE SERVICES/ 000 AUDIO VISUAL MATERIALS AND METHODS

I-477 FRICTION. n.p., n.d. Stiden.

I-478 SERVICE TRAINING AIDS CATALOG. Ford Service Publications, P.O. Box 97159, Detroit, MI 48207; 1974. 11 p.

I-479 SAFETY IN THE AUTO SHOP. Shop safety series. Doubleday Multimedia, Box 11607, 1171 Reynolds Ave., Santa Ana, CA 92705, 1975. 1 1/2 mm col. filmstrip, cassette tape. One of a set of six costing \$125.00. For others in the set, see items I-464 (17.00.050), I-465 (17.36.050), I-466 (17.15.050), I-468 (17.23.050), I-469 (17.102.050).

12.03 AUTOMOTIVE SERVICES/ 110 CURRICULUM

I-480 A CURRICULUM GUIDE FOR AUTOMOTIVE TECHNOLOGY. Richard H. Carter, Coordinator. State of Maine, Dept. of Education, Bureau of Vocational Education, Augusta, ME 04410, 1970. 64 p.

I-481 SUGGESTED OUTLINE FOR AUTOMOTIVE APPRENTICE RELATED INSTRUCTION. Nevada State Dept. of Public Instruction, Vocational Technical and Adult Div., Carson City, NV 89701. n.d. 17 p. Free.

I-482 EXPERIMENTAL COURSE OF STUDY IN SERVICE STATION REPAIRING AND MAINTENANCE SYLLABUS. The University of the State of New York, The State Education Dept., Bureau of Secondary Curriculum Development, Albany, NY 12246, 1967. 81 p.

I-483 HOW THE WHEELS REVOLVE. General Motors Corp., Detroit, MI, Rev., 1971. 31 p.

I-484 POWER COMES TO WORK. Public Relations Staff, General Motors Corp., Detroit, MI 48207; n.d. 56 p.

[1-32] POWER COOLING SYSTEMS. By Robert E. Hill. Ford Educational Staff, General Motors Corp., Detroit, MI 48202; n.d. 30 p.

[1-32] POWER AND TRANSPORTATION AND AUTOMOBILE ENGINEERING. By Howard Langport and Ronald Fisch. Dept. of Elementary and Secondary Education, Division of Curriculum and Instruction, Milwaukee Public Schools, 2222 W. Vliet St., Milwaukee, WI 53207; 1972. 36 p.

[1-33] APPRAISING AND ESTIMATING. By Robert Argall. Lakeshore Technical Institute, 243 Jefferson Ave., Muskegon, MI 49801; 1973. 30 p.

[1-32] COMMUNITY COLLEGE GUIDE FOR ASSOCIATE DEGREE PROGRAMS IN AUTO AND TRUCK SERVICE/MANAGEMENT. By Morris G. Williams. Service Managers Committee, Automobile Manufacturers Assn., Inc., 320 New Center Bldg., Detroit, MI 48202; 1969. 79 p.

[1-34] INTRODUCTION TO HYDRAULICS. n.p.; n.d. 16 p. Micrograph.

[1-33] OKLAHOMA TRADE AND INDUSTRIAL EDUCATION. Curriculum and Instructional Materials Center, State Dept. of Vocational and Technical Education, Stillwater, OK 74061; 1971. 389 p.

[1-31] PRECISION INSPECTION. By H. H. Hill. Leslie A. Gilbertson, District Vocational Institute, Eau Claire, WI; n.d. 40 p. Micrograph.

[1-37] WITH SHEET FOR SMALL GASOLINE ENGINES. State of Illinois, Board of Vocational Education and Rehabilitation, Div. of Vocational and Technical Education, 1045 Outer Park Dr., Springfield, IL 62706; 1970. 20 p.

[1-32] TIME FREE MODULAR COMPETENCY BASED CURRICULUM: AUTO SERVICE TECHNICIAN INITIAL. Div. of Vocational Education, Alabama State Dept. of Education and the U.S. Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 40 p.

[1-33] TIME FREE MODULAR COMPETENCY BASED CURRICULUM: AUTO SERVICE TECHNICIAN INTERMEDIATE. Div. of Vocational Education, Alabama State Dept. of Education and the U.S. Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 20 p.

[1-34] TIME FREE MODULAR COMPETENCY BASED CURRICULUM: AUTO SERVICE TECHNICIAN INSTRUCTIONAL RESOURCES. Div. of Vocational Education, Alabama State Dept. of Education and the U.S. Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 12 p.

[1-42] TIME FREE MODULAR COMPETENCY BASED CURRICULUM: FUEL/TUNE UP INITIAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.

[1-43] TIME FREE MODULAR COMPETENCY BASED CURRICULUM: FUEL/TUNE UP INTERMEDIATE. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 30 p.

[1-44] TIME FREE MODULAR COMPETENCY BASED CURRICULUM: FUEL/TUNE UP FINAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.

[1-45] TIME FREE MODULAR COMPETENCY BASED CURRICULUM: FUEL/TUNE UP INSTRUCTIONAL RESOURCES. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 20 p.

[1-43] AUTO MECHANICS: TRADE PREPARATORY TRAINING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 31 p.

[1-52] AUTOMOBILE MECHANIC TRAINING PROGRAM CURRICULUM OUTLINE. Ford Service Publications, P.O. Box 91150, Detroit, MI 48202; n.d. 25 p.

17.03 AUTOMOTIVE SERVICES/ 140 EDUCATION

[1-33] CAREER DEVELOPMENT STANDARDS FOR VOCATIONAL AUTOMOTIVE SERVICE INSPECTION. Motor Vehicle Manufacturers-American Vocational Assn. Industry Planning Council in cooperation with the Service Managers Committee, Motor Vehicle Manufacturers Assn. of the United States, Inc., 320 New Center Bldg., Detroit, MI 48202; 1973. 68 p.

[1-63] ACTION HANDBOOK FOR AUTOMOTIVE SERVICE INSPECTION. Motor Vehicle Manufacturers Assn. of the United States, Inc., 320 New Center Bldg., Detroit, MI 48202; 1974. 41 p.

17.03 AUTOMOTIVE SERVICES/ 210 FACILITIES

[1-45] AUTOMOTIVE BODY, SUGGESTED FLOOR PLAN. n.p.; n.d. 14 p.

[1-45] TRADE AND INDUSTRIAL EDUCATION, AUTOMOTIVE, SUGGESTED FLOOR SPACE. n.p.; n.d. 9 p.

17.03 AUTOMOTIVE SERVICES/ 250 HEALTH AND SAFETY

[1-91] SHOP SAFETY. Rehabilitation Research Foundation, Elmore, AL; Instructional Materials Laboratory, Trade and Industrial Education, P.O. Box 2847, University, AL 35486; 1966. 36 p. 51255

17.03 AUTOMOTIVE SERVICES/ 270 INSTRUCTION

[1-35] FUEL SYSTEMS: USE OF THE DELCO-ROCHESTER PARTS AND SERVICE MANUAL. Fox Valley Technical Institute, Appleton, WI; n.d. 30 p.

[1-43] TUNE UP: HOW TO USE A DISTRIBUTOR MACHINE. Fox Valley Technical Institute, Appleton, WI; n.d. 20 p.

[1-44] WORN GEARS. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 6 p.

[1-50] ACCELERATION. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 9 p.

[1-50] TUNE UP. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 10 p.

[1-42] MECHANICS: D.C. CHARGING SYSTEM SERVICE AND TESTING. Lane Community College, Lane Intermediate Education District and the Oregon State Dept. of Education, Eugene, OR; 1972. 17 p.

[1-60] SHOP TOOLS. Fundamentals of Service 51. John Deere and Co., Moline, IL 61265; 1971. 52 p.

17.03 AUTOMOTIVE SERVICES/ 350 OCCUPATIONS

[1-95] OCCUPATIONS IN AUTOMOTIVE SERVICES. Wisconsin State Employment Service, A Div. of the Dept. of Industry, Labor and Human Relations, Madison, WI; n.d.

[1-40] AN ANALYSIS OF THE AUTOMOTIVE SERVICE OCCUPATION. By Edwin J. Winfrey and David L. Horne. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1975. 65 p.

17.03 AUTOMOTIVE SERVICES/ 500 STANDARDS

I-544 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR AUTOMOBILE MECHANIC, BODY REPAIRER, AND PAINTER. US Dept. of Labor, Manpower Administration, Washington, DC 20210; 1975. 25 p. Free.

17.03 AUTOMOTIVE SERVICES/ 520 TESTS

I-25. AUTO SERVICE AND MINOR REPAIR. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35686; 1973. 75 p. \$2.00.

I-26 AUTO SERVICE AND MINOR REPAIR, ANSWER BOOK. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35686; 1973. 73 p. \$1.50.

I-27 AUTO SERVICE AND MINOR REPAIR, TEST. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35686; 1973. 73 p. \$1.25.

I-28 AUTO SERVICE AND MINOR REPAIR, TEST ANSWERS. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35686; 1973. 18 p. \$1.75.

17.03.01 BODY AND FENDER/ 110 CURRICULUM

I-29 VOCATIONAL AUTOMOBILE-BODY REPAIR: A BASIC PLAN FOR THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1967. 25 p. \$1.00.

I-30 AUTO BODY REPAIR (A SUGGESTED COURSE OUTLINE). Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35686; 1973. 61 p. \$1.75.

I-31 AUTO BODY REPAIR, ANSWER BOOK. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35686; 1973. 62 p. \$1.75.

I-32 AUTO BODY REPAIR (A SUGGESTED COURSE OUTLINE). By Clifton C. DeLamore. Coordinator of Curriculum Development, Bureau of Vocational, Technical and Adult Education, Rm B-243, Bldg. 6, Capitol Complex, Charleston, WV 25305; 1964. 28 p. \$1.25.

I-316 A SUGGESTED COURSE OUTLINE FOR AUTO BODY. By Carl Wink, Richard Reinter and Oliver Holme. New Mexico Dept. of Education, Vocational-Technical Div., Trade and Industrial Education in cooperation with Eastern New Mexico University. n.p.; n.d. 42 p.

I-388 TIME FREE MODULAR COMPETENCY BASED CURRICULUM: AUTO BODY REPAIR INITIAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.

I-389 TIME FREE MODULAR COMPETENCY BASED CURRICULUM: AUTO BODY REPAIR INTERMEDIATE. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.

I-390 TIME FREE MODULAR COMPETENCY BASED CURRICULUM: AUTO BODY REPAIR FINAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.

I-391 TIME FREE MODULAR COMPETENCY BASED CURRICULUM: AUTO BODY REPAIR INSTRUCTIONAL RESOURCES. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.

I-814 A CURRICULUM GUIDE FOR AUTO BODY. By Clyde D. Higgins, et al. Maine State Dept. of Education, Bureau of Vocational Education, Augusta, ME 04310; 1974. 42 p. Secondary/post-secondary level.

I-815 AUTO BODY. Vermont automotive curriculum guide. Vermont State Dept. of Education, Montpelier, VT 05602; 1975. 72 p. Secondary level.

I-816 AUTOBODY. Minnesota post-secondary curriculum project. Minnesota State Dept. of Education, Capitol Square Bldg., St. Paul, MN 55105; n.d. 26 p.

17.03.01 BODY AND FENDER/ 270 INSTRUCTION

I-821 AUTOBODY REFINISHING. By Leonard Colucci and Donald C. Springler. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Filmer Campus, New Brunswick, NJ 08903; 1970. 106 p. \$1.75.

17.03.01 BODY AND FENDER/ 350 OCCUPATIONS

I-579 ANALYSIS OF THE AUTO-BODY REPAIR OCCUPATION. By Edward L. Stranke and Samuel R. Speck. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 213 p.

17.03.01 BODY AND FENDER/ 520 TESTS

I-368 OHIO TRADE AND INDUSTRIAL EDUCATION ACHIEVEMENTS TESTS. Ray E. Rindlerer, Consultant. Testing and Research, Instructional Materials Laboratory, Townshend Hall, Rm 112, 1885 Neil Ave., Columbus, OH 43210; 1974. 15 p.

17.03.02 MECHANICS/ 950 AUDIO-VISUAL MATERIALS AND METHODS

I-332 AUDIOVISUAL MATERIALS FOR AUTO MECHANICS. Audio Visual Center for Occupational Education, Michigan State University, E. Lansing, MI 48824; n.d. 152 p.

I-643 POWER TRANSMISSION. 850/60. Vocational Education Media Center, Clemson University, Clemson, SC 29631; 1965. 80 transparencies and masters, 22x28 cm. \$9.25.

17.03.02 MECHANICS/ 110 CURRICULUM

I-33 AUTO MECHANICS GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 223 S. 10th St., Lincoln, NE 68508; n.d. 31 p.

I-34 VOCATIONAL AUTOMOTIVE MECHANICS CURRICULUM GUIDE. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Richmond, VA 23216; 1971. 106 p.

I-35 AUTO MECHANICS: A SUGGESTED COURSE OUTLINE. By Daniel B. Taylor. Bureau of Vocational, Technical and Adult Education, Rm B-243, Bldg. 6, Capitol Complex, Charleston, WV 25305; 1973. 52 p. \$1.25.

I-36 AUTOMOTIVE MECHANICS (A SUGGESTED COURSE OUTLINE). Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35686; 1972. 123 p. \$2.75.

I-40 COURSE OUTLINE FOR AUTOMOTIVE MECHANICS. State Board for Vocational Education, State Office Bldg., 900 E. Boulevard Ave., Bismarck, ND 58501; n.d. 33 p.

I-48 POST-SECONDARY AUTOMOTIVE MECHANICS, SUPPLEMENT: ASSIGNMENT AND JOB SHEETS (PRELIMINARY DRAFT-FOR DISCUSSION ONLY). Howard L. Newby, ed. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1971. 204 p. \$2.00.

I-191 AUTO MECHANICS: COURSE OF STUDY OUTLINES, VOLUME IX. By Erwin E. Bischoff and Harlan P. Brady. Middlesex County Vocational and Technical High Schools and Middlesex County Adult Technical Schools, 256 Easton Ave., New Brunswick, NJ; 1966. 123 p.

I-322 A SUGGESTED COURSE OUTLINE FOR AUTOMECHANICS. By William Ambrose, II, et al. The New Mexico Dept. of Education, Vocational-Technical Div., Trade and Industrial Unit, in cooperation with Eastern New Mexico University, Portales, NM 58130; n.d. 73 p.

I-336* AUTOMOTIVE MECHANICS OCCUPATIONAL PERFORMANCE SURVEY. By Sidney D. Porter and Paul H. Leifer. The Center of Vocational and Technical Education, The Ohio State University, 1960 Fenn Rd., Columbus, OH 43210; 1973. 58 p.

I-473 AUTO MECHANICS, VOLUME 1. By Gary Chastain, E.E. Francis and Norman Morris. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, MO, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1973. 315 p. \$12.00.

I-474 AUTO MECHANICS, VOLUME 2. By Gary Chastain, E.E. Francis and Norman Morris. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, MO, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1973. 405 p. \$12.50.

I-475 AUTO MECHANICS: INDIVIDUAL STUDY GUIDE, VOLUME 2. By Muhammad Anjam Asghar. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, MO, in cooperation with Career and Adult Education, State Dept. of Education, Jefferson City, MO 65101; 1973. 351 p. \$9.50.

I-476 AUTO MECHANICS: INDIVIDUAL STUDY GUIDE, VOLUME 1. By Muhammad Anjam Asghar. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, MO, in cooperation with Career and Adult Education, State Dept. of Education, Jefferson City, MO 65101; 1973. 273 p. \$8.50.

I-809 SECONDARY VOCATIONAL AUTOMOTIVE MECHANICS: A TEACHER'S OUTLINE FOR USE IN ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Rev. Trade and Industrial Education publication 9002. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1968, 1971. 189 p. \$2.50.

I-810 AUTO MECHANICS. Vermont State Dept. of Education, Montpelier, VT 05602; 1975. 1 v. (various pagings). Secondary level.

I-811 INTRODUCTION TO POWER MECHANICS. By Tom Dumenich, et al. Orange County Career Development Program, 410 Wooda Ave., Orlando, FL 32805; 1973. 1 v. (various pagings). \$5.75. Secondary level.

I-812 POWER AND ENERGY: INDUSTRIAL ARTS CURRICULUM GUIDE GRADES 9-12. Curriculum guide 1335. Louisiana State Dept. of Education, P.O. Box 44064, Capital Station, Baton Rouge, LA 70804; 1974. 43 p.

I-813 INDUSTRIAL EDUCATION: AUTO 1. East Side Union High School District, Mt. Pleasant High School, 1750 S. White Rd., San Jose, CA 95122; n.d. 1 v. (various pagings). Secondary level.

I-817 AUTOMOBILE SERVICE SPECIALIST (ENGINES). By G.L. Dumenich, G.H. Majors and Jane Powell. Orange County Career Development Program, 410 Wooda Ave., Orlando, FL 32805; 1974. 1 v. (various pagings). \$2.00. Secondary level.

17.03.02 MECHANICS/ 180 EVALUATION

I-195 AN EVALUATIVE STUDY OF AUTO MECHANICS AND AUTOMOTIVE TECHNOLOGY PROGRAMS AND CURRICULA: FINAL REPORT, PROJECT NO. 04.040.151.222. By Melvin Seamans, Joseph Rieck and Marlin Maters. Madison Area Technical College, 211 W. Carroll St., Madison, WI 53703; n.d. 133 p. Includes appendices.

17.03.02 MECHANICS/ 270 INSTRUCTION

I-41 OPERATION SHEETS FOR AUTOMOTIVE MECHANICS CURRICULUM: INTRODUCTION AND ORIENTATION, BENCH SHOP AND SAFETY, BOOK 2. State Board for Vocational Education, State Office Bldg., 900 E. Boulevard Ave., Bismarck, ND 58501; n.d. 39 p.

I-42 OPERATION SHEETS FOR AUTOMOTIVE MECHANICS CURRICULUM: CHASSIS, BOOK 3. State Board for Vocational Education, State Office Bldg., 900 E. Boulevard Ave., Bismarck, ND 58501; n.d. 66 p.

I-43 OPERATION SHEETS FOR AUTOMOTIVE MECHANICS CURRICULUM: ENGINES, BOOK 4. State Board for Vocational Education, State Office Bldg., 900 E. Boulevard Ave., Bismarck, ND 58501; n.d. 30 p.

I-44 OPERATION SHEETS FOR AUTOMOTIVE MECHANICS: FUEL SYSTEMS, BOOK 5. State Board for Vocational Education, State Office Bldg., 900 E. Boulevard Ave., Bismarck, ND 58501; n.d. 27 p.

I-45 OPERATION SHEETS FOR AUTOMOTIVE MECHANICS CURRICULUM: ELECTRICAL SYSTEMS, BOOK 6. State Board for Vocational Education, State Office Bldg., 900 E. Boulevard Ave., Bismarck, ND 58501; n.d. 38 p.

I-46 OPERATION SHEETS FOR AUTOMOTIVE MECHANICS CURRICULUM: TUNE-UP AND TROUBLE SHOOTING, BOOK 7. State Board for Vocational Education, State Office Bldg., 900 E. Boulevard Ave., Bismarck, ND 58501; n.d. 54 p.

I-554 A SUPERVISED STUDY MANUAL FOR THE AUTOMOTIVE POWER TRAIN MECHANIC. (Includes tests and answer book). By Troy Notgrass. University of Texas, Div. of Extension, Instructional Materials Services, Austin, TX; 1973. 3 v. 28 cm. \$13.30. CONTENTS: Manual.-Tests.-Answer book.

I-587* MECHANICS. By Charles Cooley. Vocational, Technical and Adult Education District 1, 620 W. Clairmont Ave., Eau Claire, WI 54701; 1974. 70 p.

I-804 THE AUTOMOBILE. The Allington Corp., 801 N. Pitt St., Alexandria, VA 22314; 1968. 91 p. \$2.00. Low reading level.

I-808 TALENT TRAINING EXERCISES. By John T. Dailey. The Allington Corp., 801 N. Pitt St., Alexandria, VA 22314; 1974. 3 v. \$8.50. "Designed to help young people learn basic principles and concepts of mechanics and technology by means of a series of aptitude training exercises." Includes instructor's guide.

17.03.02 MECHANICS/ 450 RESEARCH

I-642 CHARACTERISTICS OF AUTOMOTIVE MECHANICS IN SELECTED IOWA DEALERSHIPS AND GARAGES. By Jim L. Drouot. Iowa State University of Science and Technology, Ames, IA; 1970. 32 p. \$1.65.

17.05.02 MECHANICS/ 500 STANDARDS

I-807 NATIONAL TRUCKING INDUSTRY APPRENTICESHIP STANDARDS FOR TRUCK MECHANICS. National Joint Apprenticeship Committee for the Trucking Industry. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1970. 35 p.

17.03.02 MECHANICS/ 520 TESTS

- I-37 AUTOMOTIVE MECHANICS: TEST. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35486; 1973. 83 p. \$1.50.
- I-38 AUTOMOTIVE MECHANICS: TEST ANSWERS. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35486; 1973. 25 p. \$.75.
- I-39 AUTOMOTIVE MECHANICS: ANSWER BOOK. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35486; 1972. 138 p. \$2.25.

17.03.03 SPECIALIZATION, OTHER/ 050 AUDIO-VISUAL MATERIALS AND METHODS

- I-514* 4-SPEED MANUAL TRANSMISSION. n.p.; n.d. Cassette.
- I-508* 4-SPEED TRANSMISSIONS. n.p.; n.d. Slides.
- 17.03.03 SPECIALIZATION, OTHER/ 110 CURRICULUM
- I-396* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: BRAKE AND FRONT END INITIAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.
- I-397* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: BRAKE AND FRONT END INSTRUCTIONAL RESOURCES. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 15 p.

- I-398* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: BRAKE AND FRONT END, FINAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.
- I-424* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: TRANSMISSION INITIAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.
- I-425* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: TRANSMISSION FINAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.
- I-426* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: TRANSMISSION INSTRUCTIONAL RESOURCES. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 16 p.

- I-517 BASIC IGNITION AND THE SUN OSCILLOSCOPE: INSTRUCTOR'S GUIDE. By Dominick L. Sidoti. Vocational Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; n.d. 147 p. \$2.50.

- I-818 AUTO MECHANIC SERVICE SPECIALIST (LUBRICATION). By Virgil Hoover. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 1973. 1 v. (various pagings). \$.50. Secondary level.

- I-819 AUTOMOBILE SERVICE SPECIALIST (BRAKES). By Tom Dumenich, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 1973. 1 v. (various pagings). \$1.00. Secondary level.

- I-823 AN INSTRUCTOR'S GUIDE FOR A PROGRAM IN AUTOMATIC TRANSMISSION SERVICES. By Nelson S. Maurer. The University of the State of New York, The State Education Dept., Bureau of Continuing Education, Instructional Curriculum Development, Bureau of Secondary Curriculum Development, Albany, NY 12224; 1973. 54 p. \$.50. Secondary/post secondary level.

17.03.03 SPECIALIZATION, OTHER/ 270 INSTRUCTION

- I-47 OPERATION SHEETS FOR AUTOMOTIVE MECHANICS CURRICULUM: HEATING AND AIR CONDITIONING, BOX 8. State Board for Vocational Education, State Office Bldg., 900 E. Boulevard Ave., Bismarck, ND 58101; n.d. 50 p.
- I-494* DRIVELINE AND CHASSIS. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 11 p.
- I-496* TUNE UP IGNITION TIMING. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 12 p.

- I-641 THE C6 AUTOMATIC TRANSMISSION TRAINING HANDBOOK. Course 7521 Vol. 71 S4-L2. Ford Marketing Corp., Dearborn, MI; 1970. 54 p.

- I-820 BASIC AUTOMOTIVE AIR CONDITIONING. By John F. Carmody and Neal B. Perkins. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1971. 143, 7 p. \$2.00. Secondary level.

- I-822 BASIC AUTOMOTIVE CARBURETION AND IGNITION. By Salvatore J. Scarito and John J. O'Connell. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1970. 87 p. \$1.75. Secondary level.

17.03.99 AUTOMOTIVE SERVICES, OTHER/ 110 CURRICULUM

- I-115 CURRICULUM GUIDE FOR INDUSTRIAL MECHANICS (MECHANICAL SYSTEMS, ELECTRICAL SYSTEMS, FLUID POWER, HAND AND POWER TOOLS, ETC.). The Oregon Board of Education, Div. of Community Colleges and Career Education, 942 Lancaster Dr., NE, Salem, OR 97301; 1969. 183 p.

- I-196 AUTOMOTIVE POLLUTION CONTROL. By David B. Raudenbush. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1973. 79 p.

17.03.99 AUTOMOTIVE SERVICES, OTHER/ 270 INSTRUCTION

- I-547 SUPERVISED STUDY MANUAL FOR AUTOMOTIVE REFINISHING. By Paul L. Inghill. University of Texas, Instructional Materials Services, Austin, TX; 1971. 3 v. 28 cm. \$12.45. Includes tests and answer book.
- I-548 AUTOMOTIVE REFINISHING PRINCIPLES AND TECHNIQUES. Shop Manual. By W.T. Hobson. E. I. du Pont de Nemours and Co., Inc., Refinish Div., Wilmington, DE 19898; 1973. 120 p. 27 cm. \$2.50.

- I-639 DITZLER REPAIR MANUAL. A MANUAL FOR THE REPAIR AND MAINTENANCE OF FINISHES ON PASSENGER CARS AND COMMERCIAL VEHICLES. REV. PPC Publications, Inc., Ditzler Automotive Finishes, P.O. Box 5090, Seven Oaks Station, Detroit, MI 48215; 1970. 48 p. \$1.50.

- I-805 TRANSPORTATION LONG AGO. The Allington Corp., 801 N. Pitt St., Alexandria, VA 22314; 1968. 64 p. \$2.00. Low reading level.

17.03.99 AUTOMOTIVE SERVICES, OTHER/ 350 OCCUPATIONS

- I-806 AUTO WORKER. Yellow pages career library. Murphy Levy Warman, Philadelphia; distributed by the National Assn. of Elementary School Principals, 1801 N. Moore St., Arlington, VA 22209; 1975. 32 p. \$2.00.

17.04 AVIATION OCCUPATIONS/ 110 CURRICULUM

I-602** AEROSPACE EDUCATION CURRICULUM GUIDE. Indiana Dept. of Public Instruction, Indianapolis, IN; 1975. 108 p.

17.04.01 AIRCRAFT MAINTENANCE/ 110 CURRICULUM

I-603* MAINTENANCE MANAGEMENT, VOL. I - ORGANIZATION AND FUNCTIONS. ACT Programmed text 52-1. By Air Training Command. Dept. of the Air Force, Headquarters Air Training Command, Randolph Air Force Base, TX 78148; 1972. 150 p.

17.04.01 AIRCRAFT MAINTENANCE/ 450 RESEARCH

I-630 AIRCRAFT MAINTENANCE: TASK ANALYSIS QUESTIONNAIRE BOOKLET, OCCUPATIONAL FIELD 60/61. US Marine Corps, Office of Manpower Utilization, Marine Corps Base, Quantico, VA 22134; 1975. 58 l. \$2.95.

17.04.0101 AIRFRAME/ 110 CURRICULUM

I-344* CURRICULUM GUIDELINES FOR AIRFRAME MECHANIC'S PROGRAM FOR HIGH SCHOOL JUNIORS AND SENIORS. By Edward P. Wirth and J. Thomas Harrington. State of Illinois, Board of Vocational Education and Rehabilitation; Div. of Vocational and Technical Education, 1035 Outer Park Dr., Springfield, IL 62766; n.d. 145 p.

17.04.99 AVIATION OCCUPATIONS, OTHER/ 450 RESEARCH

I-618 FUEL SERVICES CAREER LADDER, PETROLEUM FUELS 631XO/63190. PRELIMINARY REPORT. Job Specialty Survey Div., Headquarters Lackland Military Training Center and Training Command, Lackland AFB, TX 78236; 1969. Reproduced by the CLEARINGHOUSE for Federal Scientific and Technical Information, Springfield, VA 22151; 21, 102 p. \$6.75.

I-629 AVIATION ORDNANCE: TASK ANALYSIS QUESTIONNAIRE BOOKLET, OCCUPATIONAL FIELD 6500. US Marine Corps, Office of Manpower Utilization, Marine Corps Base, Quantico, VA 22134; 1975. 45 l. \$2.30.

17.06 BUSINESS MACHINE MAINTENANCE/ 350 OCCUPATIONS

I-615 OFFICE MACHINE SERVICEMAN. California Occupational Guide no. 405. Rev. California State Dept. of Human Resources Development, 800 Capitol Mall, Sacramento, CA 95814; 1969. 3 p.

17.07 COMMERCIAL ART OCCUPATIONS/ 110 CURRICULUM

I-197** BASIC DRAWING. 3rd ed. Rev. By Charles Green. Middlesex County Vocational and Technical High Schools, New Brunswick, NJ. In cooperation with Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103 Filmer Campus, New Brunswick, NJ; 1970. 84 p.

I-198 STRUCTURAL DRAWING MANUAL. By Leslie H. Viray. State of New Jersey, Dept. of Education, Div. of Vocational Education, in cooperation with Vocational-Technical Curriculum Laboratory, Rutgers-The State University, 10 Seminary Place, New Brunswick, NJ; 1968.

I-152 COMMERCIAL ARTS. By James Schofield. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103 Filmer Campus, New Brunswick, NJ 08903; 1975. 75, 10 p. \$1.00. Secondary level.

I-733 COMMERCIAL ART COURSE OF STUDY AND TEACHING GUIDE. By James H. Schofield. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103 Filmer Campus, New Brunswick, NJ 08903; 1976. 198 p. \$3.00. Secondary level.

17.07 COMMERCIAL ART OCCUPATIONS/ 270 INSTRUCTION

I-731 CAREERS IN VISUAL ART. Product Utilization, Center for Vocational Education, 1960 Kenny Rd., Columbus, OH 43210; 1974. 83 p. \$6.50. "Recommended for use in 5th grade art classes."

17.07 COMMERCIAL ART OCCUPATIONS/ 350 OCCUPATIONS

I-599* AN ANALYSIS OF THE COMMERCIAL ART OCCUPATION. By Kenneth Mowen and Lawrence Hartman. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 19 p.

17.07.02 WINDOW DISPLAY/ 110 CURRICULUM

I-200 BOOK DISPLAY: VISUAL MERCHANDISING SERIES NO. 4. By David Phillips. Signs of the Times Publishing Co., Cincinnati, OH; 1972. 96 p.

I-201 FAIRCHILD'S BOOK OF WINDOW DISPLAY. By Shirley Joel. Fairchild Publications, Inc., New York, NY; 1973. 181 p.

17.07.03 PRODUCT DESIGN/ 110 CURRICULUM

I-613* COM. ART. 103, DESIGN I STUDY GUIDE, 1974. By Hans Krommenhoek. Milwaukee Area Technical College, 1015 N. 6th St., Milwaukee, WI 53203; 1974. 40 p.

17.07.03 PRODUCT DESIGN/ 270 INSTRUCTION

I-743 CREATING GREETING CARDS: A BUSINESS BRINGS PLEASURE. Product Utilization, Center for Vocational Education, 1960 Kenny Rd., Columbus, OH 43210; 1974. 74 p. \$5.00. Primary/middle school level.

17.09 COMMERCIAL PHOTOGRAPHY OCCUPATIONS/ 110 CURRICULUM

I-960 PHOTOGRAPHIC TECHNOLOGY I: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 1 l.

17.09 COMMERCIAL PHOTOGRAPHY OCCUPATIONS/ 270 INSTRUCTION

I-734 CAREERS IN PHOTOGRAPHY (SCIENCE). Rev. By Mary Young, Glenn Huovinen and Jim Murray. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (78) p. \$1.00. "Recommended for use in grades 7-12."

I-735 CAREERS IN PHOTOGRAPHY (MATHEMATICS). Rev. By Eric Smith and Sherrie Branyon. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (94) p. \$1.00. "Recommended for use in grades 7-12."

I-736 CAREERS IN PHOTOGRAPHY (SOCIAL STUDIES). Rev. By Emma Brown and Sharon Dudley. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; (74) p. \$1.00. "Recommended for use in grades 7-12."

I-737 CAREERS IN PHOTOGRAPHY (LANGUAGE ARTS). Rev. By Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (70) p. \$1.00. "Recommended for use in grades 7-12."

17.09 COMMERCIAL PHOTOGRAPHY OCCUPATIONS/ 350 OCCUPATIONS

I-740 PHOTOGRAPHY IN YOUR FUTURE. YODAK pamphlet no. AT 15. Eastman Kodak Co., Dept. 434, 343 State St., Rochester, NY 14650; n.d. 15 p. \$1.15.

I-741 "PHOTOGRAPHY IS . . ." AN INTRODUCTION TO CAREERS IN PROFESSIONAL AND COMMERCIAL PHOTOGRAPHY. YODAK publication no. ED 10-48. Eastman Kodak Co., Dept. 412 L, 343 State St., Rochester, NY 14650; n.d. 12 p. 4 illus.

17.09 COMMERCIAL ART OCCUPATIONS/ 470 SCHOOLS

I-739 A SURVEY OF MOTION PICTURE, STILL PHOTOGRAPHY AND GRAPHIC ARTS INSTRUCTION. A resume of instruction in American and Canadian Colleges, universities, technical institutes, and schools of photography. 4th ed. Kodak pamphlet no. T-17. By C. William Horrell. Eastman Kodak Co., Motion Picture and Education Markets Div., 343 State St., Rochester, NY; 1971. 55 p.

17.09 COMMERCIAL ART OCCUPATIONS/ 500 STANDARDS

I-738 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR THE PHOTOGRAPHIC EQUIPMENT REPAIR INDUSTRY. The Society of Photo-Technologists, Denver, Colorado. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1974. 22 p.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/ 050
AUDIO-VISUAL MATERIALS AND METHODS

I-712 BUILDING TRADES TRANSPARENCIES. Vocational Instructional Services, Texas A & M University, College Station, TX 77843; n.d. 2 v. (parts I and II). 200 transparencies and masters. \$48.00.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/ 080
COMMUNICATION

I-701 BUILDING TRADES: GLOSSARY OF KEY WORDS. Vocational reading power. By Michael Guza, Lisa Katchen and Ellen King. Oakland Schools, Pontiac, MI, distributed by Minnesota Instructional Materials Center, 3300 Century Ave., N, White Bear Lake, MN 55110; 1973. 59 p.

I-702 I KNOW--A VOCABULARY GAME FOR THE CONSTRUCTION TECHNOLOGY TRADE. By Clement O. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 331 \$6.25.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/ 110
CURRICULUM

I-49 VOCATIONAL BUILDING TRADES CURRICULUM GUIDE. Trade and Industrial Education Services, Div. of Vocational Education, State Dept. of Education, Richmond, VA 23216; 1972. 57 p.

I-50 BUILDING CONSTRUCTION. Coordinator of Curriculum Development, Bureau of Vocational, Technical and Adult Education, Rm B-243, Bldg. 6, Capitol Complex, Charleston, WV 25305; 1964. 28 p. \$1.25.

I-51 CURRICULUM GUIDE FOR TRADES AND INDUSTRIES BUILDING CONSTRUCTION PROGRAMS. Vocational Education Media Center, 109 Freeman Hall, Clemson University, Clemson, SC 29631; 1970. 91 p. \$3.00.

I-52 CURRICULUM GUIDE FOR BUILDING CONSTRUCTION. (COMMUNICATIONS, LAYOUT, CONSTRUCTION MATERIALS, CUTTING AND FITTING, FASTENING AND ASSEMBLING, FASTENING, SAFETY). The Oregon Board of Education, Div. of Community Colleges and Career Education, 942 Lancaster Dr., NE, Salem, Oregon 97310; 1972. 269 p. Free.

I-520 A SUGGESTED COURSE OUTLINE FOR BUILDING TRADES. By Alex Archuleta, et al? New Mexico Dept. of Education, Vocational Technical Div., Trade and Industrial Education in cooperation with Eastern New Mexico University, Portales, NM 88130; n.d. 54 p.

I-531* ARCHITECTURAL AND BUILDING CONSTRUCTION TECHNOLOGY: A SUGGESTED TWO-YEAR POST HIGH SCHOOL CURRICULUM, TECHNICAL EDUCATION PROGRAM SERIES NO. 9. US Govt. Print. Off., Washington, DC 20202; 1969. 109 p.

I-450** VOCATIONAL BUILDING TRADES PROGRAM FOR LOCAL SCHOOLS. By W. Earl Watson. Vocational Education Trade and Industrial Education, State Dept. of Public Instruction, Indianapolis, IN 46204; n.d. 34 p.

I-465 BUILDING CONSTRUCTION, INDIVIDUAL STUDY GUIDE, VOL. 2. By Raphael Lee, Norman Morris and Raymond L. Hanley. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1973. 243 p. \$8.50.

I-466 BUILDING CONSTRUCTION, INDIVIDUAL STUDY GUIDE, VOL. 1. By Raphael Lee, Norman Morris and Raymond L. Hanley. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1973. 173 p. \$6.50.

I-467 BUILDING CONSTRUCTION, VOL. 1. By Houston Boyd, Randall Jackson and Norman Morris. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; n.d. 309 p. \$10.00.

I-468 BUILDING CONSTRUCTION, VOL. 2. By Houston Boyd, Randall Jackson and Norman Morris. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1973. 377 p. \$11.00.

I-477 GENERAL CONSTRUCTION TRADES: A CURRICULUM GUIDE. By W. Charles Henderson and Bob Patton. Div. of Coordinated Vocational Education and Training, Oklahoma State Board of Vocational and Technical Education, Stillwater, OK 74074; 1972. 504 p. \$10.00.

I-524 BUILDING CONSTRUCTION: SKILLS OUTLINE, BEHAVIORAL OBJECTIVES, INDIVIDUALIZED CURRICULUM. By Donald Gronu, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1973. 37 p. \$1.50.

I-559* ARTICULATION GUIDE (FOR CONSTRUCTION INDUSTRY SERIES). By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 6 p. Free.

I-570* CAREERS IN CONSTRUCTION: INSTRUCTOR'S GUIDE, EXPLORATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 106 p.

I-571* CAREERS IN CONSTRUCTION: STUDENT MANUAL, EXPLORATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 97 p.

I-626 BUILDING MAINTENANCE SYLLABUS. New York State Education Dept., Bureau of Secondary Curriculum Development, Albany, NY 12224; 1973. 63 p. \$2.75.

I-707 BUILDING CONSTRUCTION TECHNOLOGY: A SUGGESTED CURRICULUM. By Joseph Henderson. Vocational Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1975. 77 p. \$1.50. Post secondary level.

I-709 BUILDING TRADES: COURSE OUTLINE. By Clair E. Hill. Arizona Dept. of Education, Div. of Vocational Education, 1535 W. Jefferson, Phoenix, AZ 85007; 1973? 106, (4) p. Secondary level.

I-723 A CURRICULUM GUIDE FOR PLUMBING, HEATING AND AIR CONDITIONING. By Bernard Balineau, et al. Maine State Dept. of Education, Bureau of Vocational Education, Augusta, ME 04300; 1972. (111) 1. Secondary/post-secondary level.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/
140 EDUCATION

I-637 TRAINING AND ENTRY INTO UNION CONSTRUCTION. Manpower R & D monograph 39. By Ray Marshall, Robert W. Glover, and William S. Franklin. US Dept. of Labor, Manpower Administration, Washington, DC 20213; 1975. 207 p. \$2.80.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/
210 FACILITIES

I-454* TRADE AND INDUSTRIAL EDUCATION, BUILDING TRADES, SUGGESTED FLOOR PLAN. n.p.; n.d. 17 p.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/
250 HEALTH AND SAFETY

I-708 CONSTRUCTION SAFETY AND HEALTH TRAINING COURSE: INSTRUCTOR'S GUIDE, 30-HOUR COURSE. US Dept. of Labor, Occupational Safety and Health Administration; for sale by the Supt. of Documents, US Govt. Print. Off., Washington, DC 20540; 1972. 109 p. \$1.80.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/
270 INSTRUCTION

I-703 CAREERS IN CONSTRUCTION (LANGUAGE ARTS). Rev. By Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. 10, 19 p. \$1.00. "Recommended for use in grades 7-12."

I-704 CAREERS IN CONSTRUCTION (SOCIAL STUDIES). Rev. By Emma Brown, Sharon Dudley and Carolyn Petty. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. 10, 28 p. \$1.00. "Recommended for use in grades 7-12."

I-705 CAREERS IN CONSTRUCTION (SCIENCE). Rev. By Mary Young, Glenn Huovinen and Carolyn Petty. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. 9, 39 p. \$1.00. "Recommended for use in grades 7-12." Low reading level.

I-706 CAREERS IN CONSTRUCTION (MATHEMATICS). Rev. By Eric Smith, Sherrie Branyon and Carolyn Petty. Orange County Career Education Program, 410 Woods Ave., Orlando, FL 32805; 197-. 9, 59 p. \$1.00. "Recommended for use in grades 7-12." Low reading level.

I-704 BUILDING MAINTENANCE: READING AND LANGUAGE ACTIVITIES. By William A. Fennman. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103 Kilmer Campus, New Brunswick, NJ 08903; 1975. 62 p. \$2.00. "Ten reading and language activity lessons for special needs students."

17.10 CONSTRUCTION AND MAINTENANCE TRADES/
350 OCCUPATIONS

I-585* AN ANALYSIS OF THE INDUSTRIAL MECHANICS OCCUPATION. By Eugene J. Hall and Raymond Turner. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 163 p.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/
500 STANDARDS

I-720 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR PAINTING AND DECORATING AND DRYWALL TAPING. National Joint Painting and Decorating and Drywall Taping Apprenticeship and Training Committee. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1972. 30 p.

17.10 CONSTRUCTION AND MAINTENANCE TRADES/
520 TESTS

I-710 PACER BUILDING TRADES TOOL IDENTIFICATION. Oakland Schools, 2100 Pontiac Lake Rd., Pontiac, MI 48054; n.d. 45 1. Test booklet. Answer sheet not included.

I-711 PERFORMANCE SKILLS PROFILE: BUILDING CONSTRUCTION. New Hampshire Dept. of Education, Div. of Vocational-Technical Education, 105 Loudon Rd., Concord, NH 03301; n.d. 2 1.

17.10.01 CARPENTRY/ 080 COMMUNICATION

I-751 I KNOW--A VOCABULARY GAME FOR THE CARPENTRY TRADE. By Clement O. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 33 1. \$6.25.

17.10.01 CARPENTRY/ 110 CURRICULUM

I-53 VOCATIONAL CARPENTRY: A BASIC PLAN FOR THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1967. 43 p. \$1.00.

I-54 RESIDENTIAL CARPENTRY, CURRICULUM MATERIAL: INSTRUCTIONAL UNITS. By William R. Penner. Curriculum and Instructional Materials Center, State Dept. of Vocational and Technical Education, Stillwater, OK 74074; 1973. 1055 p. \$15.00.

I-55 CURRICULUM GUIDE TO CARPENTRY UNITS, DESIGNED FOR CONSTRUCTION AND MAINTENANCE TRADES. State of Maine, Dept. of Education, Bureau of Vocational Education, Augusta, ME 04330; 1970. 76 p.

I-56 BUILDING TRADES: CARPENTRY GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 24 p. \$7.00.

I-206 CARPENTRY BLUEPRINT INTERPRETATION. By Vojkan Nikol. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1971. 70 p.

I-207 CARPENTRY AND CABINETMAKING, VOLUME XII: 1965 EDITION OF COURSE OF STUDY OUTLINES. By Walter C. Godehus and Franklin C. Frederick. Middlesex County Adult Technical Schools, 246 Eanton Ave., New Brunswick, NJ; n.d. 144 p.

I-203 CARPENTRY 1: HOUSE FRAMING. By Anthony A. Nitto. Vocational Div., Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1971. 190 p.

I-209 CALIFORNIA STATE JOINT APPRENTICESHIP COMMITTEE COURSE IN CARPENTRY, 1968 EDITION. California State Dept. of Education, Sacramento, CA; 1972. 314 p.

I-210 THE FRAMING SQUARE. By R. James Giuliano. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1972. 115 p.

I-206 RESOURCE GUIDE FOR PERFORMANCE-BASED CARPENTRY INSTRUCTION. By Gerald F. Day and Dennis R. Herachbach. The Bureau of Education Research and Field Services, College of Education, University of Maryland, College Park, MD 20742; 1974. 88 p.

I-341** COMMERCIAL CARPENTRY CURRICULUM MATERIAL. Curriculum and Instructional Materials Center, State Dept. of Vocational and Technical Education, Stillwater, OK 74074; 1974. 4 v. \$15.00. Student's and teacher's manuals, parts 1 and 2.

I-469 CARPENTRY: APPRENTICE RELATED TRAINING. INSTRUCTOR'S MANUAL, 2ND YEAR OF A 4-YEAR SERIES. By Oliver K. Schaer. Coordinating Council for Occupational Education, Vocational Education, State of Washington, Olympia, WA 98501; 1973. 100 p. \$12.00.

I-470 CARPENTRY: APPRENTICE RELATED TRAINING. INSTRUCTOR'S MANUAL, 4TH YEAR OF A 4-YEAR SERIES. By Oliver K. Schaer. Coordinating Council for Occupational Education, Vocational Education, State of Washington, Olympia, WA 98501; 1973. 100 p. \$12.00.

I-471 CARPENTRY: APPRENTICE RELATED TRAINING. INSTRUCTOR'S MANUAL, 3RD YEAR OF A 4-YEAR SERIES. By Oliver K. Schaer. Coordinating Council for Occupational Education, Vocational Education, State of Washington, Olympia, WA 98501; 1973. 100 p. \$12.00.

I-472 CARPENTRY: APPRENTICE RELATED TRAINING. INSTRUCTOR'S MANUAL, 2ND YEAR OF A 4-YEAR SERIES. By Oliver K. Schaer. Coordinating Council for Occupational Education, Vocational Education, State of Washington, Olympia, WA 98501; 1973. 100 p. \$12.00.

I-529 VOCATIONAL CARPENTRY CURRICULUM GUIDE. By William H. Hines and Lester C. Duenk. Trade and Industrial Education Service; Div. of Vocational Education, State Dept. of Education, Richmond, VA 23216, in cooperation with the Dept. of Education, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061; 1973. 145 p. Free.

I-572* WOOD: INSTRUCTOR'S GUIDE, PREPARATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 108 p.

I-573* WOOD: STUDENT MANUAL, PREPARATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 112 p.

I-633 CARPENTRY COMPETENCIES. Sanford Research Project, Sanford, NC 27330; 1972. 6 l. \$.40.

17.10.01 CARPENTRY/ 270 INSTRUCTION

I-749 CARPENTER'S ASSISTANT II. By Richard Johnson, Edwarda Rapacz and June Powell. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 1973. 1 v. (various pagings). \$1.00. Secondary level.

I-750 CARPENTER'S ASSISTANT I. By Richard Johnson, Eugenia Adair and Edwarda Rapacz. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 1973. 1 v. (various pagings). \$1.65. Secondary level.

17.10.01 CARPENTRY/ 350 OCCUPATIONS

I-600* AN ANALYSIS OF THE CARPENTRY OCCUPATION. By Oral McKinney, Carl A. Nordvig and Dick Emery. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 125 p.

I-747 CARPENTER. Yellow pages career library. Murphy Levy Wurman, Philadelphia; distributed by the National Assn. of Elementary School Principals, 1801 N. Moore St., Arlington, VA 22209; 1974. 32 p. \$2.00.

17.10.01 CARPENTRY/ 500 STANDARDS

I-746 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR CARPENTRY. Rev. National Joint Carpentry Apprenticeship and Training Committee. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1975. 38 p.

17.10.01 CARPENTRY/ 520 TESTS

I-57 CARPENTRY: RESIDENTIAL CONSTRUCTION. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35486; n.d. 95 p. \$2.50.

I-58 CARPENTRY: RESIDENTIAL CONSTRUCTION, ANSWER BOOK. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35486; 1971. 53 p. \$2.50.

I-748 CARPENTRY PERFORMANCE OBJECTIVES. Working copy. John W. Tucker and Gerald F. Day, comps. Dept. of Industrial Education, University of Maryland, College Park, MD; 1975. 42 p.

17.10.02 ELECTRICITY/ 110 CURRICULUM

I-59 BASIC ELECTRICITY: A SUGGESTED COURSE OUTLINE. Curriculum and Instructional Materials Center, State Dept. of Vocational and Technical Education, Stillwater, OK 74074; n.d. 190 p. \$2.00.

I-83 BUILDING TRADES: ELECTRICITY CONSTRUCTION GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 26 p. \$.75.

17.10.02 ELECTRICITY/ 150 EMPLOYMENT

I-794 EMPLOYMENT OUTLOOK FOR ELECTRIC SIGN SERVICE-MEN. Bulletin no. 1785-77. US Dept. of Labor, Bureau of Labor Statistics, for sale by the Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; n.d. 6 p. \$.25. Reprinted from THE OCCUPATIONAL OUTLOOK HANDBOOK, 1974-75 edition.

17.10.02 ELECTRICITY/ 270 INSTRUCTION

I-907 REPAIR OF A LAMP CORD AND SOCKET. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. Thomas Burt, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 4 l. "Junior-Middle-High School."

17.10.02 ELECTRICITY/ 350 OCCUPATIONS

I-594* AN ANALYSIS OF THE RESIDENTIAL ELECTRICITY OCCUPATION. By Charles E. Dearth and Carl A. Nordvig. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; n.d. 79 p.

17.10.02 ELECTRICITY/ 500 STANDARDS

I-795 NATIONAL PATTERN STANDARDS OF APPRENTICESHIP AND TRAINING FOR ELECTRICIANS. Rev. Associated Independent Electrical Contractors of America. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1975. 25 p.

17.10.02 ELECTRICITY/ 520 TESTS

I-790 PERFORMANCE SKILLS PROFILE: RESIDENTIAL WIRING. New Hampshire Dept. of Education, Div. of Vocational-Technical Education, 105 Loudon Rd., Concord, NH 03301; n.d. 2 p.

17.10.03 HEAVY EQUIPMENT (CONSTRUCTION)/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-202 BUILDING CONSTRUCTION EQUIPMENT TRANSPARENCIES. Vocational Education Media Center, Clemson University, Clemson, SC 29631, in cooperation with State Dept. of Vocational Education, State Dept. of Education, Columbia, SC 29201; n.d. Transparencies.

17.10.03 **HEAVY EQUIPMENT (CONSTRUCTION)/ 110 CURRICU-**

I-60 BUILDING TRADES: HEAVY EQUIPMENT GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 74 p. \$70.

17.10.0301 **MAINTENANCE, HEAVY EQUIPMENT/ 110 CURRICU-**

I-61 A GUIDE FOR USE IN DEVELOPING TRAINING PROGRAMS IN VOCATIONAL HEAVY-EQUIPMENT MECHANICS. Curriculum Laboratory, Trade and Technical Education, State Dept. of Vocational and Technical Education, Jackson, MS 39205; 1967. 65 p.

I-62 HEAVY CONSTRUCTION EQUIPMENT MECHANIC, A SUGGESTED GUIDE FOR A TRAINING COURSE. US Dept. of Health, Education and Welfare, Office of Education, OE-87044, Washington, DC 20202; 1969. 44 p.

I-963 HEAVY CONSTRUCTION EQUIPMENT MECHANICS. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 271.

I-964 HEAVY EQUIPMENT PARTS COURSE. Staples Area Vocational Technical Institute, Staples, MN 56479; n.d. 21.

17.10.0302 **OPERATION, HEAVY EQUIPMENT/ 110 CURRICULUM**

I-965 HEAVY EQUIPMENT OPERATORS: COURSE OUTLINE. Staples Area Vocational Technical Institute, Staples, MN 56479; n.d. 51.

17.10.04 **MASONRY/ 050 AUDIO-VISUAL MATERIALS AND METHODS**

I-66 BRICKLAYING TRANSPARENCIES - SET I. Vocational Education Media Center, Clemson University, Clemson, SC 29631; 1968. 30 transparencies and 30 masters. See set II for cont.

I-67 BRICKLAYING TRANSPARENCIES - SET II. Vocational Education Media Center, Clemson University, Clemson, SC 29631; 1968. 49 transparencies and 49 masters. \$9.75 (total I and II).

17.10.04 **MASONRY/ 110 CURRICULUM**

I-63 BUILDING TRADES: MASONRY GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 34 p. \$85.

I-64 VOCATIONAL BRICKLAYING: BASIC PLAN FOR THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; n.d. 25 p. Free.

I-65 CURRICULUM GUIDE FOR TRADES AND INDUSTRIES BRICK MASONRY PROGRAMS. Vocational Education Media Center, 109 Freeman Hall, Clemson University, Clemson, SC 29631; 1968. 31 p. \$1.25.

I-72 CONCRETE TECHNOLOGY CURRICULUM (AND PROPOSED CHAPTERS OF FUTURE PUBLICATIONS WRITTEN BY THE PORTLAND CEMENT ASSOCIATION). Portland Cement Assoc., Old Orchard Rd., Skokie, IL 60076; 1972. 11 p. Free.

I-2091 CONCRETE CONSTRUCTION: A SYLLABUS. By Melvin J. Long. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1973. 39 p.

I-211 BASIC ESTIMATING FOR MASONS. By Victor Heppe. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1967. 113 p.

I-212 BLUEPRINT READING FOR MASONS. By Victor Heppe. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; n.d. 81 p.

I-213 BRICKLAYING VOCATIONAL TRAINING: INSTRUCTOR'S GUIDE. By William E. Roark and Harry C. Plummer. Structural Clay Products Institute, 1750 Old Meadow Rd., McLean, VA 22101; 1967. 29 p.

I-214 BRICKLAYING VOCATIONAL TRAINING: STUDY GUIDE. By William E. Roark and Harry C. Plummer. Structural Clay Products Institute, 1750 Old Meadow Rd., McLean, VA 22101; 1968. 42 p.

I-215 BRICKLAYING VOCATIONAL TRAINING: STUDENT'S TEXTBOOK. By William E. Roark and Harry C. Plummer. Structural Clay Products Institute, 1750 Old Meadow Rd., McLean, VA 22101; 1968.

I-216 BRICKLAYING VOCATIONAL TRAINING TRADE PROJECTS. Structural Clay Products Institute, 1750 Old Meadow Rd., McLean, VA 22101; n.d. 75 p.

I-217 MASONRY: TEACHER'S GUIDE. By Charles Ahl. Div. of Vocational Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1973. 125 p.

I-530 CONCRETE AND MASONRY: TECHNICAL MANUAL. Headquarters, Dept. of the Army, Washington, DC 20310, for sale by US Govt. Print. Off., Washington, DC 20402; 1970. 214 p. \$2.60.

I-560* MASONRY: INSTRUCTOR'S GUIDE (PREPARATION LEVEL CONSTRUCTION INDUSTRY SERIES). By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 121 p. Free.

I-561* MASONRY: STUDENT MANUAL (PREPARATION SKILL, CONSTRUCTION INDUSTRY SERIES). By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 66 p. Free.

I-626 MASONRY COMPETENCIES. Sanford Research Project, Sanford, NC 27330; 1972. 10 p. \$50.

I-627 TRADE MASONRY SYLLABUS. New York State Education Dept., Bureau of Secondary Curriculum Development, Albany, NY 12224; 1972. 56 p. \$75.

I-659** CEMENT MASON'S CURRICULUM. By Laborn J. Hendrix and Bob Patton. Associated General Contractors of America; Instructional Materials Center, Oklahoma State Dept. of Vocational and Technical Education, Stillwater, OK 74076; 1975. 6 v. \$45.00. CONTENTS: 1. Student manual, part 1.-2. Student manual, part 2.-3. Teacher's manual, part 1.-4. Teacher's manual, part 2.

17.10.04 **MASONRY/ 270 INSTRUCTION**

I-555 SUPERVISED STUDY MANUAL FOR BRICKLAYER AND STONEMASON. By L.A. Grimes, Jr. University of Texas, Div. of Extension, Instructional Materials Services, Austin, TX; 1973. 3 v. \$12.20. CONTENTS: Manual.-Textbook.-Answer book.

I-714 CEMENT MASON. By William Semmens, June Powell and John Abel. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 1973. 1 v. (various pagings). \$75. Secondary level.

I-715 BRICK AND BLOCKLAYER (BEGINNER). By William Semmens and June Powell. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 1973. 1 v. (various pagings). \$1.50. Secondary level.

17.10.04 MASONRY/ 320 LIBRARY MATERIALS

- I-223 CEMENT AND CONCRETE REFERENCE CATALOG, PART 1 AND 2. Portland Cement Assn., Old Orchard Rd., Skokie, IL 60076; n.d. 39 p.

17.10.04 MASONRY/ 500 STANDARDS

- I-713 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR CEMENT MASONRY, ASPHALT AND COMPOSITION TRADE. Associated General Contractors of America, The Operative Plasterers' and Cement Masons' International Assn. of the U.S. and Canada, and the American Society of Concrete Construction. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1974. 22 p.

17.10.05 PAINTING AND DECORATING/ 110 CURRICULUM

- I-68 BUILDING TRADES: PAINTING AND DECORATING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 21 p. Free.

17.10.05 PAINTING AND DECORATING/ 270 INSTRUCTION

- I-655* PREPARE UNCOATED WOOD SURFACES AND APPLY COATING. Individual learning pak. Suburban Hennepin County Area Vocational Technical Centers, District 287, 1826 N. Xenium Lane, Minneapolis, MN 55441; 1973-74. (14) 1.

17.10.06 PLASTERING/ 110 CURRICULUM

- I-292 PLASTERING WORKBOOK: PART 2. James Welch. California State Dept. of Education, Sacramento, CA; 1974. 139 p.

17.10.06 PLASTERING/ 270 INSTRUCTION

- I-716 PLASTERER. By William Semmens, June Powell and John Abeel. Orange County Career Development Program, 410 Wooda Ave., Orlando, FL 32805; 1973? 1 v. (various pagings). \$1.35. Secondary level.

17.10.06 PLASTERING/ 500 STANDARDS

- I-717 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR PLASTERING. National Plastering Industry Joint Apprenticeship Trust Fund Committee. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1975. 27 p.

17.10.07 PLUMBING AND PIPEFITTING/ 020 ADMINISTRATION

- I-219 TOWARD THE IDEAL JOURNEYMAN, MANPOWER RESEARCH MONOGRAPH #20: VOLUME 2. THE TRAINING SYSTEM IN THE PIPE TRADES. US Dept. of Labor, Manpower Administration; for sale by the US Govt. Print. Off., Washington, DC 20402; n.d. 52 p. \$3.35.

17.10.07 PLUMBING AND PIPEFITTING/ 080 COMMUNICATION

- I-718 I KNOW--A VOCABULARY GAME FOR THE PLUMBING TRADE. By Clement O. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 33 l. \$6.25.

17.10.07 PLUMBING AND PIPEFITTING/ 110 CURRICULUM

- I-69 VOCATIONAL PLUMBING: A BASIC PLAN FOR THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Mississippi State University, Research and Curriculum Unit for Vocational-Technical Education, State College, MS 39762; 1967. 23 p. \$1.00.

- I-70 BUILDING TRADES: PLUMBING AND PIPEFITTING. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 26 p. \$3.75.

17.10.07 PLUMBING AND PIPEFITTING/ 140 EDUCATION

- I-619 CAREER EXPLORATION PACKAGE IN PLUMBING. Project Discovery. By Dean Clark. Southwest Iowa Learning Resources Center, Red Oak, IA 51566; 1973. 36 p.

17.10.07 PLUMBING AND PIPEFITTING/ 270 INSTRUCTION

- I-218 SIMPLE PLUMBING REPAIRS FOR THE HOME AND FARMSTEAD. Farmer's bulletin no. 2202. US Dept. of Agriculture, US Govt. Print. Off., Washington, DC 20402; 1972. 14 p.

17.10.07 PLUMBING AND PIPEFITTING/ 340 MATHEMATICS

- I-719 INDUSTRIAL TECHNICAL MATHEMATICS II FOR PLUMBERS. Plumbers Vocational School, Bloomington, IN. Instructional Materials Laboratory, Trade and Industrial Education, Indiana State College, Terre Haute, IN 47809; n.d. 1 v. (unpaged).

17.10.07 PLUMBING AND PIPEFITTING/ 350 OCCUPATIONS

- I-595* AN ANALYSIS OF THE PLUMBING OCCUPATION. By Ernest Carlton and Charles E. Hollar. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 245 p.

17.10.07 PLUMBING AND PIPEFITTING/ 500 STANDARDS

- I-722 NATIONAL APPRENTICESHIP STANDARDS FOR PLUMBING AND STEAMFITTING--PIPEFITTING. United Assn. of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the U.S. and Canada, the National Assn. of Plumbing-Heating-Cooling Contractors, and the Mechanical Contractors Assn. of America. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1974. 14 p.

17.10.08 DRY WALL INSTALLATION/ 110 CURRICULUM

- I-205 DRYWALL CONSTRUCTION WORKBOOK, PART 1. Richard S. Nelson, ed. California State Dept. of Education, Sacramento, CA; 1969. 325 p.

- I-293 DRYWALL CONSTRUCTION/TESTBOOK: PART I. By W.R. Harris, et al. California State Dept. of Education, Sacramento, CA; 1974. 96 p.

- I-295 DRYWALL CONSTRUCTION/WORKBOOK: PART 1. By W.R. Harris, et al. California State Dept. of Education, Sacramento, CA; 1974. 249 p.

- I-566* FINISHING: INSTRUCTOR'S GUIDE, PREPARATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 169 p.

- I-567* FINISHING: STUDENT MANUAL, PREPARATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 126 p.

17.10.09 GLAZING/ 500 STANDARDS

- I-742 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR THE STAINED GLASS INDUSTRY. National Joint Glaziers and Glassworker's Apprenticeship and Training Committee. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1968. 20 p.

17.10.10 ROOFING/ 110 CURRICULUM

- I-71 BUILDING TRADES: ROOFING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 19 p. \$3.35.

17.10.10 ROOFING/ 500 STANDARDS

I-721 NATIONAL APPRENTICESHIP STANDARDS FOR ROOFERS, DAMP AND WATERPROOF WORKERS. National Roofers, Damp and Waterproof Workers Joint Apprenticeship and Training Committee. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1973. 34 p.

17.10.99 CONSTRUCTION AND MAINTENANCE TRADES, OTHER/ 110 CURRICULUM

I-220 RELATED DRAWING: BUILDING CONSTRUCTION, TEACHER'S GUIDE. BEHAVIORAL OBJECTIVES, INDIVIDUALIZED CURRICULUM. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1973. 20 p.

I-221 RELATED MATHEMATICS: BUILDING CONSTRUCTION, TEACHER'S GUIDE. BEHAVIORAL OBJECTIVES, INDIVIDUALIZED CURRICULUM. By Frederick Spencer. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1973. 58 p.

I-222 RELATED SCIENCE: BUILDING CONSTRUCTION, TEACHER'S GUIDE. BEHAVIORAL OBJECTIVES, INDIVIDUALIZED CURRICULUM. By Frank Hinek. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1973. 18 p.

I-461 CIVIL ENGINEERING TECHNOLOGY: PERFORMANCE SPECIFICATIONS AND TRAINING OBJECTIVES FOR THE TECHNICIAN. By Neil Uhlman. State of Washington, Coordinating Council for Occupational Education, P.O. Box 248, Olympia, WA 98501; 1971. 53 p.

17.10.99 CONSTRUCTION AND MAINTENANCE TRADES, OTHER/ 270 INSTRUCTION

I-624 ALUMINUM SIDING APPLICATION MANUAL. Aluminum Anon., 750 3rd Ave., New York, NY; n.d. 23 p.

17.10.99 CONSTRUCTION AND MAINTENANCE TRADES, OTHER/ 350 OCCUPATIONS

I-601* AN ANALYSIS OF THE RESIDENTIAL REMODELING CONSTRUCTIONIST OCCUPATION. By Kenneth Scruggs. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 77 p.

I-944 ARCHITECT. Yellow pages career library. Murphy Levy Warman, Philadelphia, distributed by the National Assn. of Elementary School Principals, 1801 N. Moore St., Arlington, VA 22209; 1974. 32 p. \$2.00.

I-946 HERE'S HOW--THE LOCKSMITH. Associated Locksmiths of America, Inc., 3003 Live Oak St., Dallas, TX 75204; n.d. 6 p. Includes list of correspondence and residence schools of locksmith training.

17.10.99 CONSTRUCTION AND MAINTENANCE TRADES, OTHER/ 470 SCHOOLS

I-943 ARCHITECTURAL SCHOOLS IN NORTH AMERICA. Anon. of Collegiate Schools of Architecture, 1735 New York Ave., NW, Washington, DC 20006; 1973-74. (201) p. \$3.00.

17.11 CUSTODIAL SERVICES/ 110 CURRICULUM

I-281 TRAINING YOURSELF TO EFFICIENTLY CLEAN AND SANITIZE A RESTROOM. Restaurant Hotel Aids, Inc., Loring Bldg., 1409 Willow St., Minneapolis, MN 55403; 1967. 64 p.

I-338* BUILDING CUSTODIAN: A SUGGESTED GUIDE FOR A TRAINING COURSE. US Govt. Print. Off., Washington, DC 20402; 1969. 25 p.

17.12 DIESEL MECHANIC/ 110 CURRICULUM

I-337* BASIC DIESEL I: UNIT NO. 2, COMBUSTION CHAMBER DESIGN AND EFFICIENCY. Fox Valley Technical Institute, Appleton, WI; 20 p. Mimeograph.

I-953 DIESEL MECHANICS TECHNOLOGY II: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 4 l.

17.12 DIESEL MECHANIC/ 270 INSTRUCTION

I-495* NOZZLES AND INJECTORS, PRINCIPALS AND MAINTENANCE. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 21 p.

I-549 DIESEL MECHANIC, A SUPERVISED STUDY MANUAL. By Troy Notgrass. University of Texas, Instructional Materials Services, Austin, TX; 1974. 3 v, 28 cm. \$15.95. CONTENTS: Manual.-Testbook.-Answer Book.

17.12 DIESEL MECHANIC/ 320 LIBRARY MATERIALS

I-919 MATERIALS ON DIESEL MECHANICS. Library, Oklahoma State Dept. of Vocational and Technical Education, 1515 W. 6th St., Stillwater, OK 74074; 1974. 2 l. Free.

17.12 DIESEL MECHANIC/ 350 OCCUPATIONS

I-581* AN ANALYSIS OF THE DIESEL TRUCK MECHANIC OCCUPATION. By Joseph L. Kilo. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 191 p.

17.13 DRAFTING/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-509* TECHNICAL DRAFTING. n.p.; n.d. Slides.

17.13 DRAFTING/ 080 COMMUNICATION

I-693 I KNOW--A VOCABULARY GAME FOR THE DRAFTING TRADE. By Clement O. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 33 l. \$6.25.

17.13 DRAFTING/ 110 CURRICULUM

I-73 VOCATIONAL DRAFTING CURRICULUM GUIDE. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Richmond, Va 23216; 1972. 101 p.

I-74 GRAPHIC COMMUNICATIONS: DRAFTING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 25 p. Free.

I-75* DRAFTING: A SUGGESTED COURSE OUTLINE. By Daniel B. Taylor. Coordinator of Curriculum Development, Bureau of Vocational, Technical and Adult Education, Room B-243, Bldg. 6, Capitol Complex, Charleston, WV 25305; 1973. 27 p. \$1.25.

I-76 SECONDARY VOCATIONAL INDUSTRIAL DRAFTING: A TEACHER'S OUTLINE FOR USE IN THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1971. 81 p. \$2.50.

I-77 POST-SECONDARY VOCATIONAL INDUSTRIAL DRAFTING: A TEACHER'S OUTLINE FOR USE IN THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1971. 101 p. \$2.50.

- I-78** DRAFTING AND DESIGN TECHNOLOGY: A CURRICULUM GUIDE. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1973. 124 p. \$4.50.
- I-224** DRAFTING: A FIRST YEAR COURSE FOR THE COMPREHENSIVE SECONDARY SCHOOL. By Herbert C. Simonson. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; n.d. 34 p.
- I-225** TECHNICAL DRAFTING AND DESIGN: COURSE OF STUDY OUTLINES, 1968 EDITION, VOLUME XVI. By William A. Bartha, Walter Gryzb, and George Matey. Middlesex County Vocational and Technical High Schools and Adult Technical Schools, 256 Easton Ave., New Brunswick, NJ; n.d.
- I-226** TECHNICAL GRAPHICS. By George Collier and Patrick Caruso. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; n.d. 80 p.
- I-308** GENERAL DRAFTING 1-2 AND TECHNICAL DRAFTING 1-2: A GUIDE FOR TEACHERS. By Agnes Andersen, Norman Eberhardt and Marilyn Tibbitts. Dept. of Elementary and Secondary Education, Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Vliet St., Milwaukee, WI 53208; 1974. 23 p.
- I-319** A SUGGESTED COURSE OUTLINE FOR DRAFTING. By John Schmeltz and Ted Blaz. New Mexico Dept. of Education, Vocational-Technical Div., Trade and Industrial Education, in cooperation with Eastern New Mexico University, Portales, NM 88130; n.d. 27 p.
- I-359*** LAYOUT TOOLS AND PROCEDURES: UNIT II 420-348. Fox Valley Technical Institute, 1825 N. Blue-mound Dr., Appleton, WI 54911; n.d. 7 p.
- I-380*** TECHNICAL DRAFTING COURSE AT NWTI. Northeast Wisconsin Technical Institute, 2740 W. Mason St., Green Bay, WI 54303; n.d.
- I-399*** TIME FREE MODULAR COMPETENCY BASED CURRICULUM: DRAFTING INITIAL. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 30 p.
- I-400*** TIME FREE MODULAR COMPETENCY BASED CURRICULUM: DRAFTING INTERMEDIATE A. Div. of Vocational Education, Alabama State Dept. of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 40 p.
- I-401*** TIME FREE MODULAR COMPETENCY BASED CURRICULUM: DRAFTING INTERMEDIATE B. Div. of Vocational Education, Alabama State Dept. of Education, and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 30 p.
- I-402*** TIME FREE MODULAR COMPETENCY BASED CURRICULUM: DRAFTING FINAL. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 15 p.
- I-403*** FREE TIME MODULAR COMPETENCY BASED CURRICULUM: DRAFTING INSTRUCTIONAL RESOURCES. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 15 p.
- I-442*** DRAFTING, TRADE PREPARATORY TRAINING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 25 p.
- I-459** DRAFTING I. By Stephen L. Cape-Hill and Howard J. Sorenson. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; n.d. 293 p. \$10.00.
- I-460** DRAFTING COMPETENCIES. Sanford Research Project, Sanford, NC 27330; 1972. 131 p. \$7.00.
- I-694** CURRICULUM GUIDE FOR INDUSTRIAL ARTS, GRADES 9 OR 10 OR 11 OR 12: DRAFTING. Louisiana State Dept. of Education, P.O. Box 44064, Capitol Station, Baton Rouge, LA 70804; 1974. 18 p.
- I-696** ARCHITECTURAL DRAFTING: FIRST YEAR CURRICULUM. Minnesota State Drafting Advisory Committee on Occupational Education, Minnesota State Dept. of Education, Vocational-Technical Div., Capitol Square Bldg., St. Paul, MN 55101; 1971. 25 p. Post-secondary level.
- I-697** ARCHITECTURAL DRAFTING: SECOND YEAR CURRICULUM. Minnesota State Drafting Advisory Committee on Occupational Education, Minnesota State Dept. of Education, Vocational-Technical Div., Capitol Square Bldg., St. Paul, MN 55101; n.d. 18 p. Post-secondary level.
- I-698** ELECTRO-MECHANICAL DRAFTING: SECOND YEAR CURRICULUM. Minnesota State Drafting Advisory Committee on Vocational Education, Minnesota State Dept. of Education, Vocational-Technical Div., Capitol Square Bldg., St. Paul, MN 55101; 1971? 38 p. Post-secondary level.
- I-699** MECHANICAL DRAFTING: FIRST YEAR CURRICULUM. Minnesota State Drafting Advisory Committee on Occupational Education, Minnesota State Dept. of Education, Vocational-Technical Div., Capitol Square Bldg., St. Paul, MN 55101; 1971. 22 p. Post-secondary level.
- I-793** ELECTRICAL DESIGN DRAFTING: SECOND YEAR CURRICULUM. Minnesota State Drafting Advisory Committee on Occupational Education, Minnesota State Dept. of Education, Vocational-Technical Div., Capitol Square Bldg., St. Paul, MN 55101; 1972. 28 p. Post-secondary level.
- I-792** ELECTRICAL DESIGN DRAFTING: FIRST YEAR CURRICULUM. Minnesota State Drafting Advisory Committee on Occupational Education, Minnesota State Dept. of Education, Vocational-Technical Div., Capitol Square Bldg., St. Paul, MN 55101; 1971. 30 p. Post-secondary level.
- I-955** COMMUNICATION ARTS: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 2 p.
- I-956** MECHANICAL DRAFTING I: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 5 p.
- I-957** ELECTRO-MECHANICAL DRAFTING II: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 4 p.
- I-959** GRAPHIC ARTS I (AND) II, (PRODUCTION AREA) COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 7 p.
- I/13** DRAFTING/ 210 FACILITIES
- I-455*** DRAFTING, SUGGESTED FLOOR SPACE. n.p.; n.d. 6 p.

17.13 DRAFTING/ 270 INSTRUCTION

I-307 DRAFTING (INSTRUCTIONAL SUPPLEMENT). By Agnes Andersen, Gerald G. Foe, Lowell Morrison and Donald Strube. Dept. of Curriculum and Instruction, Milwaukee Public Schools, 530 W. Mifflin St., Milwaukee, WI 53208; 1969. 100 p.

I-365 MEASURING TOOLS AND THEIR APPLICATION. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 9 p.

I-825 GEOMETRIC AND POSITIONAL DIMENSIONING. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION. By James Walker, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 51. Secondary level.

17.13 DRAFTING/ 350 OCCUPATIONS

I-597 AN ANALYSIS OF THE DRAFTING OCCUPATION. By George W. Blescia, Richard A. Price and Paul Richard Neff. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 145 p.

17.13 DRAFTING/ 500 STANDARDS

I-682 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR DRAFTSMEN. The American Federation of Technical Engineers. US Dept. of Labor, Manpower Administration, Bureau of Apprenticeship and Training, Washington, DC 20210; 1972. 22 p.

17.13 DRAFTING/ 520 TESTS

I-695 PERFORMANCE SKILLS PROFILE: VOCATIONAL DRAFTING. New Hampshire Dept. of Education, Div. of Vocational-Technical Education, 404 Leiden Rd., Concord, NH 03301; n.d. 2 p.

I-700 PACER ENGINEERING DRAFTING. Oakland Schools, 2100 Pontiac Lake Rd., Pontiac, MI 48054; n.d. 33 l. Grades 11-12. Test booklet. Answer sheet not included.

17.14 ELECTRICAL OCCUPATIONS/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-791 ELECTRICAL TRADES TRANSPARENCIES. Vocational Instructional Services, Texas A & M University, College Station, TX 77843; n.d. 143 transparencies and masters. \$34.00.

17.14 ELECTRICAL OCCUPATIONS/ 080 COMMUNICATION

I-788 I KNOW--A VOCABULARY GAME FOR THE ELECTRICAL TRADES. By Clement O. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 33 l. \$6.25.

17.14 ELECTRICAL OCCUPATIONS/ 110 CURRICULUM

I-79 VOCATIONAL ELECTRICAL TRADES: TECHNICAL INFORMATION QUESTIONS AND TECHNICAL INFORMATION KEY. Vocational Instructional Services, Vocational Industrial Education, Texas A & M University, FF Box 18, College Station, TX 77843; n.d. 2 sections, 109 p. and 9 p. \$2.00.

I-80 A CURRICULUM GUIDE FOR ELECTRONIC TECHNOLOGY. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1973. 164 p. \$4.50.

I-82 CURRICULUM GUIDE FOR ELECTRICITY AND ELECTRONICS (CIRCUITRY FUNDAMENTALS, ELECTROMECHANICS, COMMUNICATIONS). Oregon Board of Education, Div. of Community Colleges and Career Education, 942 Lancaster Dr., NE, Salem, OR 97301. 1969. 147 p. Free.

I-84 CURRICULUM GUIDE FOR INDUSTRIAL ELECTRICITY. By Richard H. Carter. Maine Dept. of Education, Bureau of Vocational Education, Augusta, ME 04330; 1971. 63 p. Free.

I-86 ELECTRICAL WIREMAN: A SUGGESTED COURSE OUTLINE. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35486; 1968. 114 p. \$2.50.

I-87 ELECTRICAL WIREMAN: ANSWER BOOK. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University, AL 35486; 1968. 86 p. \$1.75.

I-230 ALTERNATING CURRENT PROJECTS-4. By Thomas F. Lefkus and Anthony F. Tarnowski. Div. of Vocational Education, Dept. of Education, State of New Jersey, Curriculum Laboratory, 10 Seminary Place, New Brunswick, NJ; 1961; repr. 1968. 197 p.

I-231 BASIC ELECTRICITY THEORY AND PRACTICE. By Harland G. Skuse. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1964. 219 p.

I-232 ELECTRICAL TRADES: VOLUME XIV, 1965 EDITION OF COURSE OF STUDY OUTLINES. By Herbert Hoepfner, Thomas F. Lefkus and Anthony Tarnowski. Middlesex County Adult Technical Schools, 256 Easton Ave., New Brunswick, NJ; n.d. 1 p.

I-233 EXPERIMENTS IN ELECTRICITY-2. By Anthony F. Tarnowski. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; n.d. 97 p.

I-234 PRINCIPLES OF ELECTRIC WIRING. By Francis Chervanek and Joseph J. Mancuso. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; n.d. 243 p.

I-235 PROJECTS IN ELECTRICITY-1. By Thomas F. Lefkus. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1965. 184 p.

I-227 D.C. PRINCIPLES AND PROJECTS-3. By Anthony F. Tarnowski. State of New Jersey, Dept. of Education, Vocational Div., Curriculum Laboratory, New Brunswick, NJ 08903; 1962. 116 p.

I-228 ELECTROMECHANICAL TECHNOLOGY: FINAL REPORT PROJECT NO. 8-6219: DEVELOPMENT AND EVALUATION OF EDUCATIONAL PROGRAMS IN ELECTROMECHANICAL TECHNOLOGY. By M.W. Roney. The Technical Education Research Centers, Inc., Cambridge, MA 02138; 1974. 48 p.

I-296 ELECTRICAL WIRING WORKBOOK. By Jack Bohannon and Jerry Cunningham. California State Dept. of Education, Sacramento, CA; 1974. 168 p.

I-343 VARIOUS CIRCUIT COURSES: COURSE OUTLINES. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 30 p.

I-394* INSTRUCTIONAL CURRICULUM IN ELECTRICITY AND ELECTRONICS. Text. Wayne Regional Vocational Center, 1000 S. Park Ave., Fort Wayne, IN 46802; 1974. 120 p.

I-427 SWEETENING AND THE ELECTRIC MOTOR. By E. J. Underhill and R. H. Buckett. In Dept. of Agriculture, Farmers' Bulletin no. 2757, 1960. 11 p. 11 cm. Washington, DC: 20402; 1960. 11 p.

I-428 SWEETENING ELECTRICAL CONNECTIONS. A HAND BOOK. 4th ed. Office of Technology Utilization, National Aeronautics and Space Administration, Washington, DC: 20402. 1967. 66 p. 11 cm.

I-444 ELECTRICITY INSTRUCTION GUIDE, PREPARA HIGH LEVEL. Construction Industry Series. By Texas Education Agency. In: Office of Documents, Printing, Printing Office, Washington, DC: 20402; 1975. 181 p.

I-465 ELECTRICITY STUDENT MANUAL, PREPARATION HIGH LEVEL. Construction Industry Series. By Texas Education Agency. In: Office of Documents, Printing, Printing Office, Washington, DC: 20402; 1975. 181 p.

I-476 TECHNICAL ELECTRICITY PROGRAMS. By Neil Bush, et al. The University of the State of New York, The State Education Dept., Bureau of Secondary Curriculum Development, Albany, NY: 12224; 1971. 83 p. 8.50". Secondary level.

17.14 ELECTRICAL OCCUPATIONS/ 120 EQUIPMENT

I-229 TOOLS, EQUIPMENT AND REFERENCE MATERIALS RECOMMENDED FOR AN ELECTRIC MOTOR TEACHING UNIT FOR HIGH SCHOOL AGRICULTURE. Agricultural Education Dept., The Pennsylvania State University, University Park, PA: 16802; n.d. 10 p.

17.14 ELECTRICAL OCCUPATIONS/ 220 INSTRUCTION

I-487 MAXIMUM LINE TRANSFERS TO BE MADE BY A LINE WORKER. Technical Institute, 1825 N. Bloomfield Dr., Appleton, WI: 54911; n.d. 10 p.

I-488 SAFETY FIRST. Fox Valley Technical Institute, 1825 N. Bloomfield Dr., Appleton, WI: 54911; n.d. 10 p.

I-500 A STUDENT'S GUIDE TO THE FOX VALLEY TECHNICAL INSTITUTE. Technical Institute, 1825 N. Bloomfield Dr., Appleton, WI: 54911; n.d. 10 p.

I-779 CAREERS IN THE ELECTRICAL INDUSTRY (SOCIAL STUDIES). Rev. Ed. Irma Brown and Irene L. Brown. Career Development Program, 410 Woods Ave., Orlando, FL: 32809; 1975. 11 p. 11 cm. "Recommended for use in grades 7-12."

I-780 CAREERS IN THE ELECTRICAL INDUSTRY (SCIENCE). Rev. Ed. Mary Young and Glenn Brown. Orange County Career Development Program, 410 Woods Ave., Orlando, FL: 32809; 1975. 11 p. 11 cm. "Recommended for use in grades 7-12."

I-781 CAREERS IN THE ELECTRICAL INDUSTRY (LANGUAGE ARTS). Rev. Ed. Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL: 32809; 1975. 11 p. 11 cm. "Recommended for use in grades 7-12."

I-782 CAREERS IN THE ELECTRICAL INDUSTRY (MATHEMATICS). Rev. Ed. Lynn Melton and Glenn Brown. Orange County Career Development Program, 410 Woods Ave., Orlando, FL: 32809; 1975. 11 p. 11 cm. "Recommended for use in grades 7-12."

17.14 ELECTRICAL OCCUPATIONS/ 350 OCCUPATIONS

I-789 ELECTRICITY AND ELECTRONICS CAREERS IN TODAY'S SERIES. By Larry Heath. Gregg Div., McGraw-Hill Book Co., Manchester Rd., Hightstown, NJ: 08511; 1976. 1 v. In 1. 66.50". CONTENTS: Student manual, Workbook, Teacher's manual and key.

17.14.01 INDUSTRIAL ELECTRICIAN/ 110 CURRICULUM

I-263 BASIC ELECTRICITY: DIRECT CURRENT GENERATORS, MOTORS AND CONTROLLERS. By Randall C. House. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ: 08903; 1971. 161 p.

I-600 INDUSTRIAL ELECTRICITY: TIME FREE COMPETENCY EVALUATION CURRICULUM. Frank Educational Laboratories, Monticore, MI: 48111; 1974. 1 v.

17.14.05 MOTOR REPAIR/ 110 CURRICULUM

I-264 HOW TO SERVICE AND REPAIR YOUR SEWING MACHINE. By Matthew Levy. Kopyak Publication, 27 Maple Dr., Great Neck, NY: 11024; n.d. 82 p.

I-590 INTRODUCTION TO THE CONTROL OF ELECTRIC MOTORS. By Frederick Spencer. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ: 08903; 1975. 109 p.

17.14.05 MOTOR REPAIR/ 270 INSTRUCTION

I-556 ELECTRIC MOTOR REPAIRMAN. By Mack C. Sutton. University of Texas, Instructional Materials Services, Austin, TX: 1973. 1 v. 28 cm. 526.45". CONTENTS: Manual, Tests, Answer book.

I-824 CLEANING AND LUBRICATION OF ELECTRIC MOTORS. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. Thomas Burt, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 31. "Senior high school."

17.14.99 ELECTRICAL OCCUPATIONS, OTHER/ 350 OCCUPATIONS

I-591 AN ANALYSIS OF THE TYPING SERVICING OCCUPATION. By Lowell Nichols. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH: 43210; 1974. 29 p.

17.15 ELECTRONICS OCCUPATIONS/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-667 SAFETY IN THE ELECTRONICS SHOP. Shop safety series. Doubleday Multimedia, Box 11607, 1371 Reynold Ave., Santa Ana, CA: 92795; 1975. 1 15mm (17 film-strip, cassette tape). One of a set of six costing \$12.00. For others in the set, see items I-666 (17.00 050), I-665 (17.00 050), I-666 (17.00 050), I-668 (17.23 050), I-669 (17.23.02 050).

17.15 ELECTRONICS OCCUPATIONS/ 080 COMMUNICATION

I-773 I KNOW--A VOCABULARY GAME FOR THE ELECTRONICS TRADE. By Clement O. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ: 08903; 1976. 33 1. \$6.25.

17.15 ELECTRONICS OCCUPATIONS/ 110 CURRICULUM

I-85 ELECTRICITY/ELECTRONICS: COMMUNICATION ELECTRONICS GUIDE AND INDUSTRIAL ELECTRONICS. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE: 68508; n.d. 60 p. Free.

I-236 ELECTRONICS, VOLUME XV. 1967 EDITION OF COURSE OF STUDY OUTLINES. By Alfred S. Emanuel, F. Percy Tucker and Samuel D. Williamson. Middlesex County Vocational and Technical High Schools and Middlesex County Adult Technical Schools, 256 Easton Ave., New Brunswick, NJ; n.d. 130 p.

I-277 ELECTRONICS LABORATORY EXPERIMENTS-1. By Michael Eshera. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, 4103-Kilmer Campus, New Brunswick, NJ: 1959. 173 p.

I-239 INTRODUCTION TO ELECTRONICS FOR ELECTRICAL AND ELECTRONICS STUDENTS-PART 1. By Glenn C. Jones. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1970. 198 p.

I-240 INTRODUCTION TO ELECTRONICS FOR ELECTRICAL AND ELECTRONICS STUDENTS-PART 2. By Glenn C. Jones. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; n.d. 368 p.

I-315 A SUGGESTED COURSE OUTLINE FOR VOCATIONAL ELECTRONICS. By John B. Harbin, et al. New Mexico Dept. of Education, Vocational-Technical Div., Trade and Industrial Education, in cooperation with Eastern New Mexico University, Portales, NM 88130; n.d. 68 p.

I-348* ELECTRONIC TECHNOLOGY: A SUGGESTED TWO-YEAR POST HIGH SCHOOL PROGRAM, SIX-QUARTER PROGRAM, ENGINEERING TECHNOLOGY SERIES NO. 3. By Jerry S. Dobrovolsky. Illinois Board of Vocational Education, Springfield, IL, and the University of Illinois-Urbana, Urbana, IL 61801; 1967. 90 p.

I-486 FUNDAMENTALS OF ELECTRICITY/ELECTRONICS, SECTION B, LEVEL 1. By Julius Schrader, Robert I. Eversoll and Larson Bland. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1972. 180 p. \$5.75. Includes transparencies.

I-489 FUNDAMENTALS OF ELECTRICITY/ELECTRONICS, SECTION A, LEVEL 1. By Julius Schrader, Robert I. Eversoll and Larson Bland. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1972. 251 p. \$8.00.

I-536 BASIC ELECTRONICS II: A CURRICULUM MANUAL, VOLUME 1, INSTRUCTOR. By L. Paul Robertson. New Mexico State Dept. of Education, Vocational-Technical, Santa Fe, NM 87501; 1974. 1000 p. 2 v.

I-537 BASIC ELECTRONICS II: A CURRICULUM MANUAL, VOLUME 2, STUDENT. By L. Paul Robertson. New Mexico State Dept. of Education, Vocational-Technical Div., Santa Fe, NM 87501; 1974. 1000 p. 2 v.

I-589* ELECTRONICS OCCUPATIONS CURRICULUM GUIDE. By Robert L. Starb, et al. Illinois Office of Education, Div. of Vocational and Technical Education, 100 N. 1st St., Springfield, IL 62777; 1977. 187 p.

I-661* BASIC ELECTRONICS: TIME AND MATERIAL COMPETENCY BASED CURRICULUM. Link Ed. Laboratories, Montgomery, AL 36111; 1974. 34 p.

I-647 BASIC ELECTRONICS: A CURRICULUM MANUAL. By L. Paul Robertson and Richard C. Harmeson. Vocational-Technical Div., New Mexico State Dept. of Education, Santa Fe, NM 87501; 1973. 2 v. \$21.00. CONTENTS: v. 1. Teacher's edition.-v. 2. Student's edition.

I-787 A CURRICULUM GUIDE FOR ELECTRONICS TECHNOLOGY. By George T. Drisko, et al. Maine State Dept. of Educational and Cultural Services, Bureau of Vocational Education, Augusta, ME 04330; 1975. (55) 1. Secondary/post secondary level.

17.15 ELECTRONICS OCCUPATIONS/ 180 EVALUATION

I-651* A SURVEY OF THE INSTRUCTIONAL MEDIA USED IN TEACHING ELECTRONICS TECHNOLOGY PROGRAMS IN THE VTAE SYSTEM IN WISCONSIN. By Frank E. Worden, Jr. Indianhead Technical Institute-Superior Campus, 805 Belknap St., Superior, WI; 1973. 86 p.

17.15 ELECTRONICS OCCUPATIONS/ 270 INSTRUCTION

I-785 FABRICATION PROCESSES AND TECHNOLOGY FOR ELECTRONICS. Rev. Electronics Vocational School, Bloomington, IN. Instructional Materials Laboratory, Trade and Industrial Education, Indiana State University, Terre Haute, IN 47809; n.d. 1 v. (unpaged). Secondary level.

17.15 ELECTRONICS OCCUPATIONS/ 450 RESEARCH

I-241 PROFESSIONAL DEVELOPMENT STUDY OF THE ELECTRONICS AND ELECTRICITY EDUCATORS IN THE STATE OF WISCONSIN. By Robert R. Johnson. Center for Vocational, Technical and Adult Education, University of Wisconsin-Stout, Menomonie, WI 74751; 1972. 200 p.

17.15 ELECTRONICS OCCUPATIONS/ 520 TESTS

I-786 PERFORMANCE SKILLS PROFILE. ELECTRONICS. New Hampshire Dept. of Education, Div. of Vocational Technical Education, 105 Loudon Rd., Concord, NH 03301; n.d. 2 p.

17.15.01 COMMUNICATIONS/ 110 CURRICULUM

I-441* COMMUNICATION AND INDUSTRIAL ELECTRONICS: TRADE PREPARATORY TRAINING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 60 p.

I-777 COMMUNICATION ELECTRONICS: A SUGGESTED COURSE OUTLINE. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, 1885 Neil Ave., Rm 112, Columbus, OH 43210; 1973. 59 p. \$2.40. Junior/senior high level.

17.15.01 COMMUNICATIONS/ 270 INSTRUCTION

I-934 CAREERS IN THE TELEPHONE INDUSTRY (SOCIAL STUDIES). Rev. By Emma Brown and Sharon Dudley. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (47) p. \$1.00. "Recommended for use in grades 7-12."

I-935 CAREERS IN THE TELEPHONE INDUSTRY (LANGUAGE ARTS). Rev. By Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (53) p. \$1.00. "Recommended for use in grades 7-12."

I-936 CAREERS IN THE TELEPHONE INDUSTRY (MATHEMATICS). Rev. By Eric Smith and Sherrie Branyon. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. 67 p. \$1.00. "Recommended for use in grades 7-12."

I-937 CAREERS IN THE TELEPHONE INDUSTRY (SCIENCE). Rev. By Mary Young, Glenn Huovinen and Jim Murray. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (45) p. \$1.00. "Recommended for use in grades 7-12."

17.15.01 COMMUNICATIONS/ 350 OCCUPATIONS

I-593* AN ANALYSIS OF THE TELECOMMUNICATIONS OCCUPATION. By John Pflieghaar, Ira R. Bickham and Hollis B. Sherburne. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 44 p.

17.15.02 INDUSTRIAL ELECTRONICS/ 110 CURRICULUM

I-644 A LASER ELECTRO-OPTICS CURRICULUM GUIDE. Publication no. 110-010. Technical Education Research Centers, Southwest Center, P.O. Box 4395, Waco, TX 76705; 1972. 1 v. \$2.50.

I-645 INTRODUCTION TO LASERS AND ELECTRO-OPTICS: MODULE 10. HELIUM-NEON GAS LASER--A CASE STUDY. Technical Education Research Centers, Inc., 44A Brattle St., Cambridge, MA 02138; 1972. 38 p. \$2.50.

I-646 DEVELOPMENT OF GENERALIZABLE EDUCATIONAL PROGRAMS IN LASER/ELECTRO-OPTICS TECHNOLOGY: FINAL REPORT, PROJECT NO. 8-0491. By Daniel M. Hull. Technical Education Research Centers, Inc., Southwest Center, P.O. Box 4395, Waco, TX 76706; 1975. 1 v.

17.15.02 INDUSTRIAL ELECTRONICS/ 520 TESTS

I-785 PACER INDUSTRIAL ELECTRICITY--ELECTRONICS ENTRY EXAM. Oakland Schools, 2100 Pontiac Lake Rd., Pontiac, MI 48054; n.d. 28 p. Test booklet, no answers included.

17.15.03 RADIO/TELEVISION/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-803 RADIO AND TELEVISION TRANSPARENCIES. Vocational Instructional Services, Texas A & M University, College Station, TX 77843; n.d. 70 transparencies and masters. \$16.80.

17.15.03 RADIO/TELEVISION/ 110 CURRICULUM

I-88 ELECTRICITY/ELECTRONICS: TELEVISION AND RADIO REPAIR GUIDE, APPLIANCE REPAIR. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 52 p.

I-329* APPLIANCE REPAIR, RADIO AND TELEVISION: TRADE PREPARATORY TRAINING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 52 p.

I-404* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: ELECTRIC APPLIANCE REPAIR INITIAL. Div. of Vocational Education, Alabama State Dept. of Education, and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 20 p.

I-405* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: ELECTRIC APPLIANCE REPAIR INTERMEDIATE A. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 30 p.

I-406* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: ELECTRIC APPLIANCE REPAIR INTERMEDIATE B. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 40 p.

I-407* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: ELECTRIC APPLIANCE REPAIR INTERMEDIATE C. Div. of Vocational Education, Alabama State Dept. of Education, and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 20 p.

I-408* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: ELECTRIC APPLIANCES REPAIR INTERMEDIATE D. Div. of Vocational Education, Alabama State Dept. of Education, and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 35 p.

I-409* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: ELECTRIC APPLIANCE REPAIR INTERMEDIATE E. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 30 p.

I-410* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: ELECTRIC APPLIANCE REPAIR FINAL. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 15 p.

I-411* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: ELECTRIC APPLIANCE REPAIR INSTRUCTIONAL RESOURCES. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 12 p.

I-416* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: RADIO AND TELEVISION REPAIR INITIAL. Div. of Vocational Education, Alabama State Dept. of Education, and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 20 p.

I-417* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: RADIO AND TELEVISION REPAIR INTERMEDIATE A. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 30 p.

I-418* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: RADIO AND TELEVISION REPAIR INTERMEDIATE B. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 12 p.

I-419* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: RADIO AND TELEVISION REPAIR INTERMEDIATE C. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 40 p.

I-420* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: RADIO AND TELEVISION REPAIR INTERMEDIATE D. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 30 p.

I-421* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: RADIO AND TELEVISION REPAIR INTERMEDIATE E. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 30 p.

I-422* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: RADIO AND TELEVISION REPAIR FINAL. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 40 p.

I-423* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: RADIO AND TELEVISION REPAIR INSTRUCTIONAL RESOURCES. Div. of Vocational Education, Alabama State Dept. of Education and the US Office of Education, Div. of Manpower Development and Training, Link Educational Laboratories, Montgomery, AL 36111; 1973. 12 p.

I-546 COLOR-TV SERVICE HANDBOOK. RCA, Distributor Products, Harrison, NJ; 1974. 275 p. \$3.75. Includes 1973-74 models of 16 manufacturers.

17.15.03 RADIO/TELEVISION/ 130 DEVELOPMENT

[I-801] INDIANA CERTIFIED RADIO AND TELEVISION SERVICE TECHNICIAN PROGRAM. Indiana Dept. of Public Instruction, 120 W. Market St., Indianapolis, IN 46204; 1970?, repr. 1974. 69 p. Post secondary level.

17.15.03 RADIO/TELEVISION/ 270 INSTRUCTION

[I-797] CAREERS IN RADIO AND TELEVISION (SOCIAL STUDIES). Rev. By Emma Brown and Sharon Dudley. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (73) p. \$1.00. "Recommended for use in grades 7-12."

[I-798] CAREERS IN RADIO AND TELEVISION (SCIENCE). Rev. By Mary Young, Glenn Huovinen and Jim Murray. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (52) p. \$1.00. "Recommended for use in grades 7-12."

[I-799] CAREERS IN RADIO AND TELEVISION (MATHEMATICS). By Eric Smith and Sharon Branyon. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (67) p. \$1.00. "Recommended for use in grades 7-12."

[I-800] CAREERS IN RADIO AND TELEVISION (LANGUAGE ARTS). Rev. By Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. 16, 67 p. \$1.00. "Recommended for use in grades 7-12."

[I-802] JOYS OF ELECTRONIC LIVING. National Alliance of Television and Electronic Service Assns., 5908 S. Troy St., Chicago, IL 60620; 1970. 14 p.

17.15.03 RADIO/TELEVISION/ 350 OCCUPATIONS

[I-592*] AN ANALYSIS OF THE TELEVISION AND RADIO SERVICE OCCUPATION. By James Pomeroy and Joe Swacher. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 113 p.

[I-784] SO YOU WANT TO BE AN ELECTRONICS TECHNICIAN. National Alliance of Television and Electronic Service Assns., 5908 S. Troy St., Chicago, IL 60620; n.d. 8 p.

17.15.99 ELECTRONICS OCCUPATIONS, OTHER/ 450 RESEARCH

[I-628] AVIONICS: TASK ANALYSIS QUESTIONNAIRE BOOKLET, OCCUPATIONAL FIELD 62. US Marine Corps, Office of Manpower Utilization, Marine Corps Base, Quantico, VA 22134; 1975. 65 l. \$3.30.

17.16 FABRIC MAINTENANCE SERVICES/ 110 CURRICULUM

[I-242] DRYCLEANING AND LAUNDERING: A SUGGESTED PROGRAM GUIDE, FASHION INDUSTRY SERIES NO. 5. The Fashion Institute of Technology, New York, NY; for sale by the US Govt. Print. Off., Washington, DC 20402; 1973. 68 p.

[I-243] THE MECHANICS OF PRESSING AND THE MODERN PRESSING ROOM. Kogos Publications, 77 Maple Dr., Great Neck, NY 11021; n.d. 131 p.

17.17 FOREMANSHIP, SUPERVISION AND MANAGEMENT DEVELOPMENT/ 110 CURRICULUM

[I-568*] ENGINEERING, SUPPORT AND MANAGEMENT SERVICES: INSTRUCTOR'S GUIDE, PREPARATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 259 p.

[I-569*] ENGINEERING, SUPPORT AND MANAGEMENT SERVICES: STUDENT MANUAL, PREPARATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 116 p.

17.19 GRAPHIC ARTS OCCUPATIONS/ 110 CURRICULUM

[I-89] A CURRICULUM GUIDE FOR GRAPHIC ARTS TECHNOLOGY. Richard H. Carter, coordinator. State of Maine, Dept. of Education, Bureau of Vocational Education, Augusta, ME 04330; 1971. 52 p.

[I-90] GRAPHIC COMMUNICATIONS: GRAPHIC ARTS GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 45 p. Free.

[I-300] GRAPHIC ARTS 1-4. By Albert Nimmer and David Snoon. Secondary Dept., Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Villet St., Milwaukee, WI 53208; 1966. 102 p.

[I-306] GRAPHIC ARTS: GRADE 12. By Philip Hansen and Norman Freund. Dept. of Elementary and Secondary Education, Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Villet St., Milwaukee, WI 53208; 1972. 351 p.

[I-318] A SUGGESTED COURSE OUTLINE FOR GRAPHIC ARTS. By Bill Zachry, et al. New Mexico Dept. of Education, Vocational-Technical Div., Trade and Industrial Education, in cooperation with Eastern New Mexico University, Portales, NM 88130; n.d. 40 p.

[I-440*] BASIC MECHANICAL DRAWING: UNIT I, LETTERING. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 30 p.

[I-444*] GRAPHIC ARTS: TRADE PREPARATORY TRAINING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 45 p.

[I-724] VISUAL COMMUNICATIONS. INDUSTRIAL ARTS CURRICULUM GUIDE GRADES 9-12. Bulletin no. 1325. Louisiana State Dept. of Education, P.O. Box 44064, Capitol Station, Baton Rouge, LA 70804; 1974. 203 p.

[I-725] A GUIDE FOR TEACHING GRAPHIC ARTS IN INDIANA. By Richard D. Wells and Gregg Steele. Vocational Instructional Materials Laboratory, Dept. of Vocational-Technical Education, Indiana State University, Terre Haute, IN 47809; 1970. 131 p. Secondary level.

17.19 GRAPHIC ARTS OCCUPATIONS/ 270 INSTRUCTION

[I-513*] THE GRAPHICS LEARNING NETWORK. Multigraphics Div., Addressograph Multigraph Corp., 1800 W. Central Rd., Mt. Prospect, IL 60056; n.d. 200 p.

[I-726] (GRAPHIC COMMUNICATIONS). Rev. By Joseph G. Gindele and John F. Gindele. EDU-PAC of Minnesota, P.O. Box 27101, Minneapolis, MN 55427; 1972, 1975-76. 1 v. (various pagings). \$13.50. CONTENTS: Introduction to the four major printing processes. Identification of machines, tools, and equipment commonly found in the graphic arts laboratory. Common terms and definitions used in graphic arts. Safety in the graphic arts laboratory. Occupational opportunities in the graphic arts field. Includes tests.

[I-727] ILLUSTRATOR DRAFTSMAN I AND C. Rev. Naval Education and Training Command; for sale by the Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1973. 153 p. \$2.25. Post-secondary level.

17.19.02 PRINTING PRESS OCCUPATIONS/ 020 ADMINISTRATION

[I-244] TOWARD THE IDEAL JOURNEYMAN, MANPOWER RESEARCH MONOGRAPH #20, VOLUME 4. THE TRAINING SYSTEM IN THE PRINTING TRADES. US Dept. of Labor, Manpower Administration; for sale by the Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; n.d. 24 p. \$.25.

17.19.02 PRINTING PRESS OCCUPATIONS/ 050 COMMUNICATION

I-728 I KNOW--A VOCABULARY GAME FOR THE PRINTING TRADE. By Clement O. Froth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4101-Kilmer Campus, New Brunswick, NJ 08903; 1976. 44 l. \$6.25.

17.19.02 PRINTING PRESS OCCUPATIONS/ 110 CURRICULUM

I-91 VOCATIONAL OFFSET PRINTING: A BASIC PLAN FOR THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1967. 50 p. \$1.00.

17.19.02 PRINTING PRESS OCCUPATIONS/ 320 LIBRARY MATERIALS

I-729 BIBLIOGRAPHY OF PUBLICATIONS ON PRINTING. Library, Oklahoma State Dept. of Vocational and Technical Education, 515 W. 6th Ave., Stillwater, OK 74074; 1974. 6 l.

17.19.02 PRINTING PRESS OCCUPATIONS/ 350 OCCUPATIONS

I-545 CONNECTICUT PRINTING INDUSTRY OCCUPATIONS: OCCUPATIONAL NEEDS AND EDUCATIONAL REQUIREMENTS. Connecticut State Dept. of Education, Div. of Vocational Education and The University of Connecticut Labor Education Center, n.p.; 1968. 60 p.

17.19.02 PRINTING PRESS OCCUPATIONS/ 520 TESTS

I-730 PERFORMANCE SKILLS PROFILE: GRAPHIC ARTS (OFFSET). New Hampshire Dept. of Education, Div. of Vocational-Technical Education, 105 Loudon Rd., Concord, NH 03301; n.d. 2 p.

17.19.03 LITHOGRAPHY, PHOTOGRAPHY AND PLATE MAKING/ 350 OCCUPATIONS

I-596* AN ANALYSIS OF THE LITHOGRAPHIC PRINTING OCCUPATION. By Gene A. Innis, Earl D. Thorp and Edwin B. Fausnaugh. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 57 p.

17.19.03 LITHOGRAPHY, PHOTOGRAPHY AND PLATE MAKING/ 450 RESEARCH

I-632 LITHOGRAPH: TASK ANALYSIS QUESTIONNAIRE BOOKLET, OCCUPATIONAL FIELD 1500. US Marine Corps, Office of Manpower Utilization, Marine Corps Base, Quantico, VA 22134; 1975. 36 l. \$1.85.

17.21.01 INSTRUMENTS (OTHER THAN WATCHES AND CLOCKS)/ 110 CURRICULUM

I-245 PRECISION INSPECTION MANUAL-1. By William Grohe. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4101-Kilmer Campus, New Brunswick, NJ 08903; 1971. 166 p.

I-246 PRECISION INSPECTION MANUAL-2. By William Grohe. Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4101-Kilmer Campus, New Brunswick, NJ 08903; 1972. 312 p.

17.21.01 INSTRUMENTS (OTHER THAN WATCHES AND CLOCKS)/ 170 EQUIPMENT

I-288 INSTRUMENT CHARTS. The Bristol Co., A Div. of American Chain and Cable Co., Waterbury, CT 06720; n.d. Bristol's Recorder Chart 8244, 100.

I-575* METUTOYO MEASURING INSTRUMENTS. Catalog no. 1100. MET Corp., 2025 Toune Rd., Elk Grove Village, IL 60007; 1975. 224 p.

17.23 METALWORKING/ 020 ADMINISTRATION

I-247 TOWARD THE IDEAL JOURNEYMAN, MANPOWER MONOGRAPH #20, VOLUME 1. APPRENTICESHIP TRAINING IN THE MACHINIST AND TOOL AND DIE MAKER TRADES. US Dept. of Labor, Manpower Administration, for sale by the Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; n.d. 26 p. \$2.25.

17.23 METALWORKING/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-512* SCREW THREAD CALCULATIONS. n.p.; n.d. Videocassette.

I-657* TURRET LATHE OPERATION. n.p.; n.d. Slides.

I-658* UPSET AND DROP FORGING. n.p.; n.d. Slides.

I-668 SAFETY IN THE METAL SHOP. Shop safety series. Doubleday Multimedia, Box 11607, 1371 Reynolds Ave., Santa Ana, CA 92705; 1975. 1 35mm cpl. filmstrip, cassette tape. One of a set of six costing \$125.00. For others in the set, see items I-664 (17.00 050), I-665 (17.03 050), I-666 (17.36 050), I-667 (17.15 050), I-669 (17.2302 050).

17.23 METALWORKING/ 110 CURRICULUM

I-92 METAL FABRICATION: FOUNDRY GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 23 p. Free.

I-101 VOCATIONAL METAL TRADES: A BASIC PLAN FOR THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1967. 62 p. Free.

I-301 METALS TECHNOLOGY 1-3: A GUIDE FOR TEACHERS. By Norman Eberhardt and George Finco. Dept. of Elementary and Secondary Education, Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Vliet St., Milwaukee, WI 53208; 1972. 58 p.

I-312 GENERAL METALWORK: A WORKTEXT FOR THE FIRST YEAR OF METALWORK. By Everett R. Glazener. Steck-Vaughn Co., Austin, TX; 1968. 170 p. \$1.44. Includes test.

I-313 BASIC METALWORKING TECHNOLOGY: A TEXT FOR BEGINNING METALWORK. By Everett R. Glazener, Steck-Vaughn Co., Austin, TX; 1970. 172 p. \$5.07.

I-360* MACHINE DESIGN TECHNOLOGY: A SUGGESTED TWO-YEAR POST-HIGH SCHOOL PROGRAM, SIX-QUARTER PROGRAM, ENGINEERING TECHNOLOGY SERIES NO. 4. By Jerry S. Dobrovolsky. Illinois Board of Vocational Education, Springfield, and the University of Illinois-Urbana, Urbana, IL; 1968. 74 p.

I-379* SUGGESTED GUIDELINES FOR A VOCATIONAL DIVERSIFIED METALS PROGRAM. Board of Vocational Education and Rehabilitation, Div. of Vocational and Technical Education, 1035 Outer Park Dr., Springfield, IL 62706; n.d. 207 p.

I-457 METALWORK: TECHNOLOGY AND PRACTICE. By Oswald A. Ludwig, Willard J. McCarthy and Victor E. Repp. McKnight Publishing Co., Bloomington, IL; 1975. 658 p.

I-562* METAL: INSTRUCTOR'S GUIDE, PREPARATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 251 p.

I-563* METALS STUDENT MANUAL, PREPARATION LEVEL. Construction Industry Series. By Texas Education Agency. Supt. of Documents, US Govt. Print. Off., Washington, DC 20540; 1975. 120 p.

I-604* METALS PROCESSING SPECIALIST AND METAL PROCESSING TECHNICIAN. Dept. of the Air Force, Headquarters, US Air Force, Washington, DC 20330; 1974. 4 v. 200 p. PARTIAL CONTENTS: Introduction. Oxy-acetylene welding, cutting, soldering, brazing, and hard surfacing; introductory metal arc welding. Special metallic arc and resistance welding.

I-649 CURRICULUM GUIDE FOR METALS. 2nd ed. By William Oleson. Div. of Community College and Career Education, Oregon State Dept. of Education, 942 Lancaster Dr. NE, Salem, OR 97310; 1974.

I-681 INSTRUCTOR'S GUIDE AND ANSWER BOOK: A GUIDE TO RELATED CLASSROOM CURRICULUM FOR METALWORKING TRAINEES. 3rd ed. By William E. Hardman. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1974. 1 v. (various pagings). \$8.50.

I-688 SYLLABUS OF RELATED TRAINING FOR APPRENTICES (FOUR YEARS): TOOLMAKER, DIE MAKER, MOLDBAKER, MACHINIST. By Seymour Lehrer and William Bachman. The National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1969. 238 p. \$11.50.

I-916 INDUSTRIAL EDUCATION: METAL I. East Side Union High School District, Mt. Pleasant High School, 1750 S. White Rd., San Jose, CA 95122; n.d. 368 l.

17.23 METALWORKING/ 170 EQUIPMENT

I-687 THE HARGIS SPEED AND FEED CALCULATOR. Developed by Herbert Hargis. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; n.d. Manual calculator and instructions. \$4.95.

17.23 METALWORKING/ 270 INSTRUCTION

I-503* THE SHAPER AND PLANER. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 4 p.

I-504* BROACHING. Fox Valley Technical Institute; 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 8 p.

I-505* THE LATHE FAMILY - ENGINE LATHE. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 10 p.

I-648 MACHINIST'S PRACTICAL GUIDE, Rev. By Morse Cutting Tools. Morse Mailing Service, P.O. Box C-2, New Bedford, MA 02741; 1920, rev. 1963-1970. 96 p. \$1.00.

I-670 INSTRUCTOR TRAINING WITHIN INDUSTRY. By Seigmar F. Blamberg. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1968. 248 p. \$13.75.

I-672 STARTER SERIES. By Joseph R. Todd. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1967. 5 v. \$27.90. CONTENTS: 1. Starter math for pre-job training. 2. Starter shop practices for pre-job training. 3. Starter blueprint workbook for pre-job training. 4. Instructor's guide and answer book for pre-job training. 5. Part project prints.

I-826 METAL INDUSTRIES. Prepared as an aid in implementing the WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. Gerald Finch, contrib. Industrial Education Materials Development Project, University of Wisconsin-Stout, Menomonie, WI; n.d. 25 l. "Junior-middle high school."

17.23 METALWORKING/ 340 MATHEMATICS

I-686 MATHEMATICS FOR METALWORKING TRAINEES. 4th ed. By William E. Hardman. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1975. 1 v. (various pagings). \$8.95. Revised to include metrics.

I-752 MODERN MATHEMATICS AS APPLIED TO MACHINE TRADES. By Guy J. Hale, Lester W. Hale, and Daniel Ravshich. Instructional Materials Laboratory, Dept. of Vocational-Technical Education, Indiana State University, Terre Haute, IN 47809; 1973. 2 v. \$8.00. Post secondary level.

17.23 METALWORKING/ 350 OCCUPATIONS

I-689 THE MAKING OF A MACHINIST: A PROFILE OF A CAREER PROFESSIONAL IN THE TOOLING AND MACHINING INDUSTRY. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; n.d. 18 p. Free.

17.23 METALWORKING/ 510 TECHNIQUES

I-663* REPORT OF THE RESULTS OF THE CURRICULUM ARTICULATION WORKSHOP, FY 1975, HELD BETWEEN SECONDARY AND POST-SECONDARY EDUCATORS IN THE MORRIS PARK TECHNICAL INSTITUTE--CESA #13 AREA: CURRICULUM MATERIALS STUDIES - WELDING, METAL FABRICATION, MACHINE TOOL. By Russell Mandy and Celm Stapleton. Center for Vocational, Technical and Adult Education, University of Wisconsin-Stout, Menomonie, WI 54751; 1975. 1 v. (various pagings).

17.23 METALWORKING/ 520 TESTS

I-677 FIRST YEAR TECHNICAL PROFICIENCY EVALUATION TEST, PART I AND II, FOR TOOL AND DIE MAKER, PRECISION MACHINIST, MOLDBAKER TRAINEES. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1974. 15 p. \$2.50.

I-678 SECOND YEAR TECHNICAL PROFICIENCY EVALUATION TEST, TOOL AND DIE MAKER, PRECISION MACHINIST, MOLDBAKER APPRENTICES: PARTS I AND II. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1969. 33 p. \$2.50.

I-679 THIRD YEAR TECHNICAL PROFICIENCY EVALUATION TEST FOR TOOL AND DIE MAKER, PRECISION MACHINIST, MOLDBAKER APPRENTICES. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1971. 26 p. \$2.50.

I-680 FOURTH YEAR TECHNICAL PROFICIENCY EVALUATION TEST FOR TOOL AND DIE MAKER, PRECISION MACHINIST, MOLDBAKER APPRENTICES. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1971. 33 p. \$2.50.

17.23.01 FOUNDRY/ 110 CURRICULUM

I-443* FOUNDRY: TRADE PREPARATORY TRAINING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 23 p.

17.23.02 MACHINE SHOP/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-334* AUDIOVISUAL MATERIALS FOR MACHINE SHOP. Audio Visual Center for Occupational Education, Michigan State University, East Lansing, MI 48824; n.d. 173 p.

I-510* ENGINE LATHE. n.p.; n.d. Videocassette.

I-511* SETTING UP THE BOXMILL HOLDER - SETTING UP THE SECOND BOXMILL - POINTING TOOL HOLDER - SETTING UP THE POINTING TOOL - AUTOMATIC SCREW MACHINE. n.p.; n.d. Videocassette.

I-477 MACHINERY IN THE MACHINE SHOP. Shop series articles. Don Edin Multimedia, Inc. 11601 E. 1st Boulevard, Santa Ana, CA 92705; 1979. 1 v. 100 pp. 110 strips/cassette tapes. One of a set of six costing \$125.00. For others in the set, see items I-664 (\$120.00), I-665 (\$120.00), I-666 (\$120.00), I-667 (\$120.00), I-668 (\$120.00).

I-676 SHOP PROJECT PRINTS. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; n.d. 9 prints. \$4.25.

17.23.02 MACHINE SHOP/ 110 CURRICULUM

I-93 METAL FABRICATION: MACHINE SHOP GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 213 S. 10th St., Lincoln, NE 68508; n.d. 28 p. \$3.65.

I-94 MACHINE SHOP. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University of Alabama, University, AL 35486; 1979. 104 p. \$2.75.

I-95 MACHINE SHOP (A SUGGESTED COURSE OUTLINE). By Alton Pruitt, Coordinator of Curriculum Development, Bureau of Vocational, Technical and Adult Education, Rm B-243, Bldg. 6, Capitol Complex, Charleston, WV 25305; 1964. 35 p. \$1.25.

I-96 MACHINE SHOP, ANSWER BOOK. Instructional Materials, Trade and Industrial Education, P.O. Box 2847, University of Alabama, University, AL 35486; 1970. \$2.00.

I-97 MACHINE TRADES I, LEARNER'S MANUAL (BENCH WORK, DRILLING MACHINE WORK, LATHE WORK, TURK LATHE WORK, POWER SAW WORK) WORKBOOK. Ohio Trade and Industrial Education Service, Instructional Materials Laboratory, 1885 Neil Ave., Ohio State University, Columbus, OH 43210; 1973. 378 p. \$3.25.

I-98 MACHINE TRADES I, ANSWER BOOK (TO MACHINE TRADES I MANUAL). Ohio Trade and Industrial Education Service, Instructional Materials Laboratory, 1885 Neil Ave., Ohio State University, Columbus, OH 43210; 1973. 92 p. \$1.50.

I-248 EXPLORATORY MACHINE SHOP: A TEACHER'S MANUAL. By John L. Rio, Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 103-Kilmer Campus, New Brunswick, NJ; 1973. 62 p.

I-249 MACHINE SHOP: VOLUME XVII, 1966 EDITION OF COURSE OF STUDY OUTLINES. By Anton Check and Fred Boyo, Middlesex County Vocational and Technical High Schools and Middlesex County Adult Technical Schools, 256 Easton Ave., New Brunswick, NJ; n.d. 127 p.

I-250 THEORY I-MACHINE SHOP. By Stanley Angowski, Div. of Vocational Education, Dept. of Education, State of New Jersey, Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1972. 196 p.

I-277 MACHINE SHOP TEST BOOK PART 1. Bureau of Industrial Education, California State Dept. of Education, 720 Capitol Mall, Sacramento, CA 95814; n.d. 130 p.

I-305 MACHINE SHOP. By Karl L. Markworth, Otto A. Northquest, Robert T. Schweiger, and Alan A. Stephan, Secondary Dept., Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Violet St., Milwaukee, WI 53208; 1966. 228 p.

I-321 A SUGGESTED COURSE OUTLINE FOR MACHINE SHOP. By Marlin Mier, Joe Fisher and Tom Denton. The New Mexico Dept. of Education, Vocational Technical Div., Trade and Industrial Education, in cooperation with Eastern New Mexico University, Portales, NM 88130; n.d. 53 p.

I-445* MACHINE SHOP: TRADE PREPARATORY TRAINING. CIDE, Nebraska Dept. of Education, Div. of Vocational Education, 315 S. 10th St., Lincoln, NE 68508; n.d. 28 p.

I-480 MACHINE SHOP INSTRUCTIONAL UNITS. By Roy Ayers, Curriculum and Instructional Materials Center, Div. of Trade and Industrial Education, Oklahoma Board of Vocational and Technical Education, Stillwater, OK 74074; 1972. 68 p. \$15.00.

I-481 VOCATIONAL MACHINE SHOP. By Randall Jackson and Howard J. Sorenson, Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1973. 132 p. \$4.75.

I-482 VOCATIONAL MACHINE SHOP. By Larson M. Bland and Randall Jackson, Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1972. 275 p. \$10.00.

I-650 METALS COMPETENCIES. Sanford Research Project, Sanford, NC 27330; 1972. 9 l. \$5.55.

I-662* MACHINE SHOP OPERATIONS: TIME FREE MODULAR COMPETENCY BASED CURRICULUM. Link Educational Laboratories, Montgomery, AL 36111; 1975. 5 v.

I-961 MACHINE SHOP I (AND) MACHINE SHOP II: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 4 p.

17.23.02 MACHINE SHOP/ 170 EQUIPMENT

I-617 TWO THOUSAND TWO HUNDRED TEMPLATES. A Supplement to "Creative Facilities Planning for Occupational Education." By Fred C. Finsterbach and William C. McNeice, Educare Associates, 572 Snyder Ave., Berkeley Heights, NJ 07922; 1969. 64 l. Diagrams.

17.23.02 MACHINE SHOP/ 270 INSTRUCTION

I-671 MACHINE SHOP THEORY FOR METALWORKING TRAINEES. 3rd ed. By William E. Hardman. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1973. 116 p. \$6.95.

I-691 BLUEPRINT READING FOR METALWORKING TRAINEES. 3rd ed. By William E. Hardman. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1974. 2 v. \$19.45. CONTENTS: 1. Text.-2. Packet of blueprint sheets.

I-908 EXPLORATORY SHOP MANUAL FOR GRADES SEVEN AND EIGHT (STUDENT EDITION). State Dept. of Education, Agribusiness Education Service, Montgomery, AL 36104; n.d. 167 p.

I-911 TOOLS AND BASIC MACHINES. The Allington Corp., 801 N. Pitt St., Alexandria, VA 22314; 1968. 106 p. \$3.00.

I-915 MACHINE SHOP SUGGESTED JOB AND TASK SHEETS, PART I: 25 ELEMENTARY JOBS. Vocational Instructional Service, Texas A & M University, College Station, TX 77843; 1975. 1 v. (various pagings). \$11.20.

17.23.02 MACHINE SHOP/ 340 MATHEMATICS

I-361* MACHINE TRADES MATH. By Ronald Butt. Lakeshore Technical Institute, 843 Jefferson Ave., Sheboygan, WI 53081; 1972. 300 p.

I-914 SHOP TRIGONOMETRY. Instructional Materials Laboratory, Indiana State University, Terre Haute, IN 47809; n.d. (82) p. From lesson sheets prepared at the Henry Ford Trade Schools: "... the emphasis in this series is on right angle trigonometry as applied to the machinist trade."

17.23.03 MACHINE TOOL OPERATION/ 110 CURRICULUM

I-99 CURRICULUM GUIDE FOR MACHINE TOOL TECHNOLOGY. By Richard H. Carter. State of Maine, Dept. of Education, Bureau of Vocational Education, Augusta, ME 04330; 1970. 50 p.

I-347* DRILL PRESS WORK (UNIT V: 420-348). Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; 1973. 11 p.

I-358* LATHE SETUPS AND OPERATIONS: UNIT VIII 420-348. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 35 p.

I-364* MCH SH 335, 336, 337, 338 - TURRET, LATHE 1, 2, 3, 4 - TURRET LATHE OPERATION. By Donald L. Marlow. Milwaukee Area Technical College, Industrial Div., District Office of Instruction, 1015 N. 6th St., Milwaukee, WI 53203; n.d. 252 p.

I-374* SINGLE SPINDLE AUTOMATIC SCREW MACHINE OPERATION: MCH SH 347, 348, 349, 350, VOLUME I. By Donald L. Marlow. Milwaukee Area Technical College, Industrial Div., District Office of Instruction, 1015 N. 6th St., Milwaukee, WI 53203; n.d. 178 p.

I-375* SINGLE SPINDLE AUTOMATIC SCREW MACHINE OPERATION: MCH SH 347, 348, 349, 350, VOLUME II. By Donald L. Marlow. Milwaukee Area Technical College, Industrial Div., 1015 N. 6th St., Milwaukee, WI 53203; n.d. 327 p.

I-954 MACHINE TOOL REBUILDING: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 31 p.

I-962 MACHINE TOOL OPERATIONS: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 31 p.

17.23.03 MACHINE TOOL OPERATION/ 210 FACILITIES

I-447* MACHINE TRADES EQUIPMENT LIST AND SUGGESTED FLOOR SPACE. n.p.; n.d. 32 p.

17.23.03 MACHINE TOOL OPERATION/ 270 INSTRUCTION

I-675* BASIC PRECISION MACHINING FOR METALWORKING TRAINEES. By Herbert Harig. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DE 20022; 1974. 2 v. \$48.00. CONTENTS: 1. Text -2. Instructor's guide and answer book.

I-690 MACHINE TOOLS AND RELATED EQUIPMENT: A BASIC GUIDE FOR METALWORKING TRAINEES. By Andrew La Torre, et al. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1975. 45 p. \$4.50.

I-917 SUPERVISED STUDY GUIDE FOR RELATED INSTRUCTION FOR MACHINIST. By Billy F. Streater. Instructional Materials Service, Div. of Extension, University of Texas, Austin, TX 78712; 1972. 3 v. \$12.50. CONTENTS: 1. Supervised study guide.-2. Assignment tests.

17.23.03 MACHINE TOOL OPERATION/ 350 OCCUPATIONS

I-584* ANALYSIS OF THE MACHINE TRADES OCCUPATION. By Charles W. Hall and Harold L. Emory. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 25 p.

17.23.03 MACHINE TOOL OPERATION/ 450 RESEARCH

I-362* MACHINE TRADES TASK ANALYSIS QUESTIONNAIRE. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 35 p.

17.23.03 MACHINE TOOL OPERATION/ 500 STANDARDS

I-909 NATIONAL POLICY OF APPRENTICESHIP FOR MACHINISTS (AUTOMATIC SCREW-MACHINES). National Screw Machine Products Assn. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1969. 18 p.

17.23.03 MACHINE TOOL OPERATION/ 520 TESTS

I-912 PERFORMANCE SKILLS PROFILE: MACHINE TOOL. New Hampshire Dept. of Education, Div. of Vocational-Technical Education, 105 Loudon Rd., Concord, NH 03301; n.d. 2 p.

17.23.05 SHEET METAL/ 110 CURRICULUM

I-102 BUILDING TRADES: SHEET METAL GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 22 p. \$70.

I-103 BASIC PLAN FOR THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION IN VOCATIONAL SHEET METAL. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1967. 29 p. \$1.00.

I-289 SHEET METAL MATERIALS/TESTBOOK. By Robert E. Powell, et al. California State Dept. of Education, Sacramento, CA; 1974. 56 p.

I-290 SHEET METAL MATERIALS/WORKBOOK. By Robert E. Powell, et al. California State Dept. of Education, Sacramento, CA; 1974. 117 p.

I-291 SHEET METAL PATTERN DEVELOPMENT/WORKBOOK. By Robert Powell, et al. California State Dept. of Education, Sacramento, CA; 1974. 233 p.

I-294 SHEET METAL PATTERN DEVELOPMENT/TESTBOOK. By Robert E. Powell, et al. California State Dept. of Education, Sacramento, CA; 1974. 233 p.

I-297 SHEET METAL TOOLS AND EQUIPMENT/WORKBOOK. By Robert E. Powell, et al. California State Dept. of Education, Sacramento, CA; 1974. 171 p.

17.23.06 WELDING AND CUTTING/ 080 COMMUNICATION

I-759 I KNOW--A VOCABULARY GAME FOR THE WELDING TRADE. By Clement O. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 33 p. \$6.25.

I-760 WELDING GLOSSARY OF KEY WORDS. Vocational Reading Power Project. By Michael Guza, Lisa Kaichen and Ellen King. Oakland Schools, Pontiac, MI; distributed by Minnesota Instructional Materials Center, 3300 Century Ave., N. White Bear Lake, MN 55110; 1973. 57 p.

17.23.06 WELDING AND CUTTING/ 110 CURRICULUM

I-104 WELDING, CURRICULUM MATERIAL (PRELIMINARY DRAFT). By Roy Ayres. Curriculum and Instructional Materials Center, State Dept. of Vocational and Technical Education, Stillwater, OK 74074; 1971. 350 p. \$15.00.

I-105 METAL FABRICATION: WELDING AND CUTTING GUIDE. Nebraska Dept. of Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 90 p. \$65.

I-106 WELDING: A SUGGESTED COURSE OUTLINE. Coordinator of Curriculum Development, Bureau of Vocational, Technical and Adult Education, Rm B-243, Bldg. 6, Capitol Complex, Charleston, WV 25305; 1966. 49 p. \$1.25.

I-107 A GUIDE IN VOCATIONAL WELDING (COMBINATIONS): PRELIMINARY DRAFT, FOR DISCUSSION ONLY. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1967. 60 p. Free.

I-251 ELEMENTARY ARC WELDING SKILLS. By John F. Pierson and Charles Jochem. Div. of Vocational Education, Dept. of Education, State of New Jersey, Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; n.d. 131 p.

I-252 WELDING: COURSE OF STUDY OUTLINES, 1968 EDITION VOLUME XXV. By Alex Zakupowski. Middlesex County Vocational and Technical High Schools and Adult Technical Schools, 256 Easton Ave., New Brunswick, NJ; n.d. 125 p.

I-299 WELDING TECHNOLOGY. By William H. Johnson. Secondary Dept., Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Villet St., Milwaukee, WI 53208; 1966. 200 p.

I-309 FUNDAMENTALS OF WELDING. By William H. Johnson. Secondary Dept., Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Villet St., Milwaukee, WI 53208; 1965. 205 p.

I-317 A SUGGESTED COURSE OUTLINE FOR WELDING. By Larry Lunsford, et al. New Mexico Dept. of Education, Vocational-Technical Div., Trade and Industrial Education, in cooperation with Eastern New Mexico University, Portales, NM 88130; n.d. 48 p.

I-427* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: WELDING INITIAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.

I-428* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: WELDING INTERMEDIATE. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 30 p.

I-429* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: WELDING FINAL. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 40 p.

I-430* TIME FREE MODULAR COMPETENCY BASED CURRICULUM: WELDING INSTRUCTIONAL RESOURCES. Independent Garage Owners of America, 4001 Warren Blvd., Hillside, IL 60162; n.d. 15 p.

I-438* WELDING: VARIOUS UNITS OF INSTRUCTIONAL MATERIALS. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 60 p.

I-446* WELDING AND CUTTING, TRADE PREPARATORY TRAINING GUIDE. Nebraska Dept. of Education, Div. of Vocational Education, 233 S. 10th St., Lincoln, NE 68508; n.d. 90 p.

I-478 WELDING. By Earl Cowan, et al. Curriculum and Instructional Materials Center, Div. of Trade and Industrial Education, Oklahoma State Board of Vocational and Technical Education, Stillwater, OK 74074; 1971, rev. 1974. 800 p. \$15.00.

I-485 WELDING: STUDENT MATERIAL. By Earl Cowan, et al. Curriculum and Instructional Materials Center, State Dept. of Vocational and Technical Education, Stillwater, OK 74074; 1974. 600 p. \$4.50.

I-487 WELDING SKILLS AND TECHNOLOGY, RESISTANCE AND SPECIAL WELDING PROCESSES. By Aziz-Ur-Rehman Chawhan and Randall Jackson. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1972. 150 p. \$5.50. Transparencies.

I-488 WELDING SKILLS AND TECHNOLOGY, SHIELDED METAL ARC. By Aziz-Ur-Rehman Chawhan and Randall Jackson. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1972. 200 p. \$9.00. Includes transparencies.

I-490 WELDING SKILLS AND TECHNOLOGY, OXY-ACETYLENE. By Aziz-Ur-Rehman and Randall Jackson. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1972. 150 p. \$6.25. Includes transparencies.

I-754 WELDING CURRICULUM. Minnesota State Dept. of Vocational-Technical Education, Capitol Square Bldg., St. Paul, MN 55101; n.d. 28 p. Secondary level.

I-753 A CURRICULUM GUIDE FOR WELDING TECHNOLOGY. Maine State Dept. of Educational and Cultural Services, Bureau of Vocational Education, Augusta, ME 04330; 1975. (55) 1. Secondary/post secondary level.

I-755 GUIDELINES: INSTRUCTIONAL WELDING. By H.L. Fordyce. Indiana State Dept. of Public Instruction, available from Vocational Instructional Materials Laboratory, Indiana State University, Terre Haute, IN 47809; 1975. 213 p. \$2.65. Secondary/post secondary level.

I-756 WORKING DRAFT CURRICULUM GUIDES FOR WELDING. Louisiana State Dept. of Education, P.O. Box 44064, Capitol Station, Baton Rouge, LA 70804; 1973. 2 v. CONTENTS: 1. Text.-2. Tests and answers.

I-758 CURRICULUM GUIDE, VOCATIONAL TRAINING SKILLS: WELDING, ELECTRICIAN, HEAVY EQUIPMENT OPERATOR. Human Resources Development Center, Tuskegee Institute, Tuskegee Institute, AL 36088; 1974. 43 1. "Each curriculum is designed to train illiterates for jobs."

17.23.06 WELDING AND CUTTING/ 210 FACILITIES

I-453* TRADE AND INDUSTRIAL EDUCATION, WELDING, SUGGESTED FLOOR SPACE: n.p.; n.d. 9 p.

17.23.06 WELDING AND CUTTING/ 340 MATHEMATICS

I-757 WORKING DRAFT CURRICULUM GUIDES FOR WELDING COURSE MATHEMATICS: PROBLEMS AND ANSWERS. Louisiana State Dept. of Education, P.O. Box 44064, Capitol Station, Baton Rouge, LA 70804; 1973. 1 v. (various pagings).

17.23.06 WELDING AND CUTTING/ 350 OCCUPATIONS

I-588* AN ANALYSIS OF THE WELDING OCCUPATION. By Alex L. Pucci and George F. Reichel. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 77 p.

17.23.0601 GAS WELDING/ 110 CURRICULUM

I-493 WELDING SKILLS AND TECHNOLOGY: GAS TUNGSTEN ARC AND GAS METAL ARC. By Aziz-Ur-Rehman and Randall Jackson. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Vocational Education Div., State Dept. of Education, Jefferson City, MO 65101; 1972. Includes transparencies.

17.23.07 TOOL AND DIE MAKING/ 110 CURRICULUM

I-108 VOCATIONAL TOOL AND DIE MAKING: A BASIC PLAN FOR THE ORGANIZATION AND MANAGEMENT OF INSTRUCTION. Research and Curriculum Unit, Mississippi State University, P.O. Drawer DX, Mississippi State, MS 39762; 1967. 61 p. \$1.00.

I-967 TOOL AND DIE TECHNOLOGY: COURSE OUTLINE. Staples Area Vocational Technical Institute, Staples, MN 56479; n.d. 31.

17.23.07 TOOL AND DIE MAKING/ 270 INSTRUCTION

I-673 MOLDBAKING AND DIE CAST DIES FOR METALWORKING TRAINEES. By John Klutz. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1974. 2 v. \$16.70. CONTENTS: Text.-Instructor's answer book.

I-674 BASIC JIG AND FIXTURE MAKING FOR METALWORKING TRAINEES. By Herbert Harig. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1974. 2 v. \$19.90. CONTENTS: Text.-Instructor's guide.

I-913 LEARNING THE TOOL AND DIE MAKER TRADE. Manpower Research monograph no. 17. By Morris A. Horowitz and Irwin L. Herrstadt. US Dept. of Labor, Manpower Administration; for sale by the Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1970. 18 p. \$.30. Condensed version of "A Study of the Training of Tool and Die Makers," by the same authors.

17.23.08 DIE SINKING/ 110 CURRICULUM

I-372 PRESSES AND PUNCHES. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 11 p. Mimeograph.

I-356 INTRODUCTION TO BASIC DIE MAKING. Fox Valley Technical Institute, 1825 N. Bluemound Dr., Appleton, WI 54911; n.d. 19 p. Mimeograph.

I-253 SO YOU WANT TO KNOW ABOUT... DIE CUTTING. By Kenneth E. Scott. Apparel Institute, Inc., in cooperation with Kogos International Corp., 77 Maple Dr., Great Neck, NY; n.d. 20 p.

17.23.08 DIE SINKING/ 270 INSTRUCTION

I-682 BASIC DIEMAKING. By D. Eugene Ostergaard. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1963. 208 p. \$12.95.

I-683 SECOND YEAR CURRICULUM OF RELATED STUDY FOR TOOL AND DIEMAKER APPRENTICES WITH SUPPLEMENTARY TEACHING AIDS FOR USE WITH BASIC DIEMAKING. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; n.d. 71 p. \$2.25.

I-684 ADVANCED DIEMAKING. By D. Eugene Ostergaard. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; 1967. 166 p. \$12.95.

I-685 THIRD YEAR CURRICULUM OF RELATED STUDY FOR TOOL AND DIEMAKER APPRENTICES, FOR USE WITH ADVANCED DIEMAKING. National Tool, Die and Precision Machining Assn., 9300 Livingston Rd., Washington, DC 20022; n.d. 21 p. \$1.95.

17.23.99 METALWORKING, OTHER/ 270 INSTRUCTION

I-552 HAND TOOLS FOR METALWORKING TRADES. By L.A. Grimes, et al. University of Texas, Instructional Materials Services, Austin, TX; 1972. 3rd ed. 130 p. 28 cm. \$7.00.

17.23.99 METALWORKING, OTHER/ 350 OCCUPATIONS

I-918 CAREER OPPORTUNITIES IN THE STEEL INDUSTRY. BBCCS pamphlet no. 1020. B'nai B'rith Career and Counseling Services, 1640 Rhode Island Ave., NW, Washington, DC 20036; 1972. 18 p. \$1.00.

17.24 METALLURGY/ 110 CURRICULUM

I-366* METALLURGICAL TECHNOLOGY: A SUGGESTED TWO-YEAR POST HIGH SCHOOL CURRICULUM, TECHNICAL EDUCATION PROGRAM SERIES NO. 10. US Govt. Print. Off., Washington, DC 20402; 1969. 113 p.

17.26 PERSONAL SERVICES/ 270 INSTRUCTION

I-254 INSTRUCTIONAL MATERIALS FOR COSMETOLOGY AND BARBERING. By Olive P. Scott. ERIC Clearinghouse on Vocational and Technical Education, The Center for Vocational and Technical Education, The Ohio State University, 1960 Kenny Rd., Columbus, OH 43210; 1973. 29 p.

17.26.01 BARBERING/ 110 CURRICULUM

I-257 HAIR STRUCTURE AND CHEMISTRY SIMPLIFIED. By A.H. Powitt. Milady Publishing Corp., 3839 White Plains Rd., New York, NY 10467; n.d. 303 p.

17.26.01 BARBERING/ 180 EVALUATION

I-255 SURVEY AND ANALYSIS OF BARBERING IN WISCONSIN. Final report, project 09-082-151-2221. By Marvin Vircks. Milwaukee Area Technical College, 1015 N. 6th St., Milwaukee, WI 53203; 1973. 99 p.

17.26.02 COSMETOLOGY/ 110 CURRICULUM

I-258 STANDARD TEXTBOOK OF COSMETOLOGY. By Constance V. Kibbe and Pearl C. Ware. Milady Publishing Corp., 3839 White Plains Rd., Bronx, NY 10467; 1972. 494 p.

I-525 INSTRUCTIONAL GUIDE FOR COSMETOLOGY. Trade and Industrial Education Service, Div. of Vocational Education, State Dept. of Education, Richmond, VA 23216, in cooperation with the Dept. of Education, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061; 1972. 248 p. Free.

I-535 BEAUTY CULTURE I: TEACHERS GUIDE. By Dorothy S. Mankiw and Michael A. Elefante. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1973. 501 p. \$6.00.

17.26.02 COSMETOLOGY/ 340 MATHEMATICS

I-522 MATHEMATICS FOR COSMETOLOGY-PART 1. By Mabel Latino. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1971. 175 p. \$2.50.

I-523 MATHEMATICS FOR COSMETOLOGY-PART 2. By Mabel Latino. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ; 1971. 167 p. \$2.50.

17.27 PLASTICS OCCUPATIONS/ 110 CURRICULUM

I-460 TASK ANALYSIS FOR INDUSTRIAL PLASTICS. By Oliver K. Schaer and Richard Evans. State of Washington, Coordinating Council for Occupational Education, Trade, Industrial and Technical Education Section, 216 Old Capitol Bldg., Olympia, WA 98504; 1973. 71 p. \$1.50.

I-966 PLASTIC INJECTION MOLDING: COURSE OUTLINE. Staples Area Vocational Technical Institute, Staples, MN 56479; n.d. 31.

17.27 PLASTICS OCCUPATIONS/ 270 INSTRUCTION

I-763 AN EXPERIMENTAL RESOURCE UNIT IN PLASTICS FOR INDUSTRIAL ARTS. University of the State of New York, State Education Dept., Bureau of Secondary Curriculum Development, Albany, NY 12224; 1966, repr. 1972. 195 p. Junior/senior high level.

17.28 PUBLIC SERVICE OCCUPATIONS/ 110 CURRICULUM

I-605* EXPLORATION OF PUBLIC SERVICE OCCUPATIONS. By California State Dept. of Education, Vocational Education Section, Program Planning Unit. For sale by Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 96 p.

I-606* ORIENTATION TO PUBLIC SERVICE OCCUPATIONS. By California State Dept. of Education, Vocational Education Section, Program Planning Unit. For sale by Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 418 p.

I-607* PREPARING FOR PUBLIC SERVICE OCCUPATIONS: COMMON CORE. By California State Dept. of Education, Vocational Education Section, Program Planning Unit. For sale by Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 214 p.

I-608* ADMINISTERING PUBLIC SERVICE OCCUPATIONS: AN IMPLEMENTATION GUIDE. By California State Dept. of Education, Vocational Education Section, Program Planning Unit. For sale by Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 160 p.

I-609* PREPARING FOR PUBLIC SERVICE OCCUPATIONS: SOCIAL SERVICES. By California State Dept. of Education, Vocational Education Section, Program Planning Unit. For sale by Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 140 p.

I-610* PREPARING FOR PUBLIC SERVICE OCCUPATIONS: EDUCATIONAL SERVICES. By California State Dept. of Education, Vocational Education Section, Program Planning Unit. For sale by Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 172 p.

I-942 REVIEW AND ANALYSIS OF CURRICULA FOR OCCUPATIONS IN PUBLIC SERVICES. Information series no. 29. By Wiley B. Lewis. ERIC Clearinghouse on Vocational and Technical Education, Center for Vocational and Technical Education, Ohio State University, 1960 Kenny Rd., Columbus, OH 43210; 1970. 32 p.

17.28 PUBLIC SERVICE OCCUPATIONS/ 350 OCCUPATIONS

I-941 PUBLIC SAFETY WORKER. Yellow pages career library. Murphy Levy Wurman, Philadelphia; distributed by the National Assn. of Elementary School Principals, 1801 N. Moore St., Arlington, VA 22209; 1974. 32 p. \$2.00.

17.28.01 FIREMAN TRAINING/ 110 CURRICULUM

I-345* DEVELOPMENT AND EVALUATION OF CURRICULUM AND MEDIA TO TRAIN PART-TIME FIRE SERVICE INSTRUCTORS IN RURAL AREAS. By Frank E. Kloss. Western Wisconsin Vocational, Technical and Adult Education District, 6th and Vine Sts., La Crosse, WI 54601; n.d. 60 p.

I-516* WISCONSIN FIRE SERVICE TRAINING: LESSON PLAN. n.p.; n.d. 40 p. Mimeograph.

17.28.02 LAW ENFORCEMENT TRAINING/ 110 CURRICULUM

I-611* PREPARING FOR PUBLIC SERVICE OCCUPATIONS: LAW ENFORCEMENT SERVICES. By California State Dept. of Education, Vocational Education Section, Program Planning Unit. For sale by Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1975. 134 p.

17.28.02 LAW ENFORCEMENT TRAINING/ 270 INSTRUCTION

I-259 SHOPLIFTING PREVENTION CLINIC: INSTRUCTOR'S GUIDE. Div. of Vocational Education, Distributive Education Section, State Dept. of Public Education of Louisiana, P.O. Box 44064, Baton Rouge, LA 70804; n.d. 65 p.

I-926 COURTHOUSE CAREERS (MATHEMATICS). Rev. By Eric Smith and Sherrie Branyon. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. 18, 44 p. \$1.00. "Recommended for use in grades 7-12."

I-927 COURTHOUSE CAREERS (LANGUAGE ARTS). Rev. By Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (88) p. \$1.00. "Recommended for use in grades 7-12."

I-928 COURTHOUSE CAREERS (SOCIAL STUDIES). Rev. By Emma Brown and Sharon Dudley. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. 18, 33 p. \$1.00. "Recommended for use in grades 7-12."

I-929 COURTHOUSE CAREERS (SCIENCE). Rev. By Mary Young, Glenn Huovinen and Jim Murray. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (91) p. \$1.00. "Recommended for use in grades 7-12."

I-930 CAREERS IN THE F.B.I. (SCIENCE). Rev. By Mary Young, Glenn Huovinen and Jim Murray. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (101) p. \$1.00. "Recommended for use in grades 7-12."

I-931 CAREERS IN THE F.B.I. (SOCIAL STUDIES). Rev. By Emma Brown and Sharon Dudley. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (117) p. \$1.00. "Recommended for use in grades 7-12."

I-932 CAREERS IN THE F.B.I. (MATHEMATICS). Rev. By Eric Smith and Sherrie Branyon. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (115) p. \$1.00. "Recommended for use in grades 7-12."

I-933 CAREERS IN THE F.B.I. (LANGUAGE ARTS). Rev. By Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (206) p. \$1.00. "Recommended for use in grades 7-12."

17.28.02 LAW ENFORCEMENT TRAINING/ 410 PROGRAMS

I-260 BAD CHECKS. Adult Distributive Education, Div. of Vocational Education, State of Ohio, Columbus, OH 43215; n.d. Mimeograph.

I-261 OHIO'S SHOPLIFTING LAWS: NEW OHIO CRIMINAL CODE EFFECTIVE JANUARY 1, 1974. The Ohio Council of Retail Merchants, 71 E. State St., Columbus, OH 43215; 1974. 7 p.

I-262 PREVENTIVE SHOPLIFTING EXECUTIVE PLAN, THE YOUNGSTOWN AREA CHAMBER OF COMMERCE. 200 Wick Bldg., Youngstown, OH 44503, with permission of the Public Relations Div., Indianapolis Police Dept.; n.d. 12 p.

17.28.99 PUBLIC SERVICE OCCUPATIONS; OTHER/ 110 CURRICULUM

I-654** TEACHER AIDES: A SUGGESTED TWO-YEAR POST-HIGH SCHOOL CURRICULUM. By New York University, New York, NY. For sale by the Supt. of Documents, US Govt. Print. Off., Washington, DC 20402; 1974. 52 p.

17.28.99 PUBLIC SERVICE OCCUPATIONS; OTHER/ 270 INSTRUCTION

I-922 CAREERS IN SOCIAL WORK (SCIENCE). Rev. By Mary Young, Glenn Huovinen and Jim Murray. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (65) p. \$1.00. "Recommended for use in grades 7-12."

I-923 CAREERS IN SOCIAL WORK (MATHEMATICS). Rev. By Eric Smith and Sherrie Branyon. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (140) p. \$1.00. "Recommended for use in grades 7-12."

I-924 CAREERS IN SOCIAL WORK (LANGUAGE ARTS). Rev. By Lynn Melton, et al. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (114) p. \$1.00. "Recommended for use in grades 7-12."

I-925 CAREERS IN SOCIAL WORK (SOCIAL STUDIES). Rev. By Emma Brown and Sharon Dudley. Orange County Career Development Program, 410 Woods Ave., Orlando, FL 32805; 197-. (126) p. \$1.00. "Recommended for use in grades 7-12."

17.28.99 PUBLIC SERVICE OCCUPATIONS, OTHER/ 350 OCCUPATIONS

I-938 (CAREERS IN EDUCATION). National Center for Information on Careers in Education, 1607 New Hampshire Ave., NW, Washington, DC 20009; n.d. 10 pamphlets in envelope. Free. CONTENTS: To teach or not to teach... that is the question.-Teaching: una causa extraordinaria.-Teaching: una forma de ayudar.-Teacher aide.-Secondary school teacher.-Preschool teacher.-Elementary school teacher.-Careers in pupil personnel services.-Careers in adult and continuing education.-Education staffing patterns update.

I-939 PRINCIPAL. Yellow pages career library. Murphy Levy Wurman, Philadelphia; distributed by the National Assn. of Elementary School Principals, 1801 N. Moore St., Arlington, VA 22209; 1975. 32 p. \$2.00.

I-940 SOCIAL WORKER. Yellow pages career library. Murphy Levy Wurman, Philadelphia; distributed by the National Assn. of Elementary School Principals, 1801 N. Moore St., Arlington, VA 22209; 1975. 32 p. \$2.00.

17.29 QUANTITY FOOD OCCUPATIONS/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-153 NATIONAL LIVE STOCK AND MEAT BOARD, CATALOG OF EDUCATIONAL PUBLICATIONS AND AUDIO-VISUAL AIDS. National Live Stock and Meat Board, 36 S. Wabash Ave., Chicago, IL 60603; n.d. 12 p.

I-179 THE YOU'RE IMPORTANT SERIES. Restaurant-Hotel Aids, 2120 Girard Ave., S, Minneapolis, MN 55405; 1973. 3-ring loose-leaf notebook with tape cassettes.

I-333* AUDIOVISUAL MATERIALS FOR FOOD SERVICE. Audio Visual Center for Occupational Education, Michigan State University, East Lansing, MI 48824; n.d. 158 p.

17.29 QUANTITY FOOD OCCUPATIONS/ 080 COMMUNICATION

I-767 I KNOW--A VOCABULARY GAME FOR THE FOOD TRADES. By Clement A. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 33 p. \$6.25.

17.29 QUANTITY FOOD OCCUPATIONS/ 10 CURRICULUM

I-180 DEVELOPING A HOSPITALITY PROGRAM IN HIGH SCHOOLS: FOOD SERVICE AND LODGING EDUCATION. By Richard L. Almarode. Council on Hotel, Restaurant and Institutional Education, 1522 K. Street, NW, Washington, DC 20005; 1970. 54 p.

I-265 SANITATION FOR FOODSERVICE WORKERS. By Treva M. Richardson. Cahners Books, A Div. of Cahners Publishing Co., Inc., 89 Franklin St., Boston, MA 02110; n.d. 148 p.

I-275 INTRODUCTION TO PROFESSIONAL FOOD SERVICE. Rev. By James P. Coffman. Cahners Books, A Div. of Cahners Publishing Co., Inc., 89 Franklin St., Boston, MA 02110; 1974. 311 p.

I-279 TRAINING YOURSELF FOR FOOD SERVICE. Restaurant-Hotel Aids, Div. of Cybk Corp., 2120 Girard Ave., S, Minneapolis, MN 55405; 1974. 50 p.

I-280 REVISED QUANTITY FOOD PURCHASING GUIDE: INVENTORY, PURCHASING, ESTIMATING FOOD NEEDS FOR BUDGETING PURPOSES. By Francis N. Beau. Cahners Books, 89 Franklin St., Boston, MA 02110; n.d. 92 p.

I-286 CUSTOMER/EMPLOYEE RELATIONSHIPS. By Joanne M. O'Haver. Ser-Vo-Tel Institute, Cahners Books, A Div. of Cahners Publishing Co., Inc., 89 Franklin St., Boston, MA 02110; 1974. 120 p.

I-323 LUNCHEON AND SUPPER DISHES. By Eulalia Blair. Cahners Books, 89 Franklin St., Boston, MA 02110; 1973. 213 p. \$12.50.

I-324 NURSING HOME MENU PLANNING - FOOD PURCHASING, MANAGEMENT. By Brother Herman E. Zaccarelli and Mrs. Josephine Maggione. Cahners Books, 89 Franklin St., Boston, MA 02110; 1972. 356 p. \$14.95.

I-325 SPECIAL ATMOSPHERE THEMES FOR FOODSERVICE. By Jule Wilkinson. Cahners Books, 89 Franklin St., Boston, MA 02110; 1972. 238 p. \$16.50.

I-326 INDUSTRIAL FOODSERVICE AND CAFETERIA MANAGEMENT. By Mickey Warner. Cahners Books, 89 Franklin St., Boston, MA 02110; 1973. 181 p. \$14.50.

I-327 SEMINAR ON SANITATION FOR RESTAURANT OWNERS AND MANAGERS, UNIT I. By Joyce C. Threlkeld, et al. Instructional Materials Laboratory, Div. of Vocational Education, University of Kentucky, Lexington, KY 40506; 1972. 42 p.

I-328 SEMINAR ON SANITATION FOR RESTAURANT OWNERS AND MANAGERS, UNIT II. By Joyce C. Threlkeld, et al. Curriculum Development Center, Div. of Vocational Education, University of Kentucky, Lexington, KY 40506; 1972. 40 p.

I-370* ORGANIZING A FOOD TRAINING PROGRAM. US Govt. Print. Off., Washington, DC 20402; 1967. 26 p.

I-538 HOSPITALITY EDUCATION: A CURRICULUM MANUAL. By Audrey J. Geis. The Vocational-Technical Div. of the New Mexico State Dept. of Education, Santa Fe, NM 87501; 1973. 300 p. \$12.00.

I-539 HOSPITALITY EDUCATION - STUDENT MATERIAL. By Audrey J. Geis. New Mexico State Dept. of Education, Vocational-Technical Div., Santa Fe, NM; n.d. 300 p. \$4.50.

I-958* FOOD PREPARATION I AND II: COURSE OUTLINE. Staples Area Vocational-Technical Institute, Staples, MN 56479; n.d. 31.

17.29 QUANTITY FOOD OCCUPATIONS/ 340 MATHEMATICS

I-766 MATHEMATICS FOR COMMERCIAL FOODS. By Norman Wersan. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1975. 249 p. \$2.50.

17.29.01 BAKER/ 340 MATHEMATICS

I-656* MATHEMATICS FOR THE BAKER. By Melvin Bogdany. Vocational-Technical Curriculum Laboratory, Rutgers-The State University, Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 173 p. \$3.50.

17.29.01 BAKER/ 500 STANDARDS

I-768 NATIONAL APPRENTICESHIP AND TRAINING STANDARDS FOR ASSOCIATED RETAIL BAKERS OF AMERICA. Associated Retail Bakers of America. US Dept. of Labor, Bureau of Apprenticeship and Training, Washington, DC 20210; 1975. 16 p.

17.29.02 COOK/CHEF/ 110 CURRICULUM

I-273 THE TEACHING OF PROFESSIONAL COOKING: INSTRUCTOR'S GUIDE. By Lerol Folsom. Cahners Publishing Co., 89 Franklin St., Boston, MA 02110; 1974. 273 p. \$9.95.

I-531 COOKS: SUGGESTED GUIDE FOR A TRAINING COURSE. D.O.T. OCCUPATIONAL CODE 313.381. By Blanche E. Dorfman and Elaine P. Dickinson. n.p.; n.d. \$2.00.

17.29.03 MEAT CUTTER/ 270 INSTRUCTION

I-550 A SUPERVISED STUDY MANUAL FOR MEATCUTTER. By Troy Notgrass and James Hitchcock. University of Texas, Instructional Materials Services, Austin, TX; 1973. 3 v. 28 cm. \$16.45. CONTENTS: Manual.-Test-book.-Answer book.

17.29.04 WAITER/WAITRESS/ 110 CURRICULUM

I-437* WAITER-WAITRESS: A SUGGESTED GUIDE FOR A TRAINING COURSE. By Benjamin Schaefer. US Dept. of Health, Education and Welfare, Office of Education, Manpower Development and Training Program, Washington, DC; n.d. 52 p.

17.30 REFRIGERATION/ 110 CURRICULUM

I-532 REFRIGERATION: INDIVIDUAL STUDY GUIDE. By Muhammad Aslam Asghar. Instructional Materials Laboratory, Dept. of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, in cooperation with Career and Adult Education, State Dept. of Education, Jefferson City, MO 65101; 1974. 299 p.

17.30 REFRIGERATION/ 270 INSTRUCTION

I-772 PART I: REFRIGERATION SERVICE. 2nd ed. Whirlpool Corp., Technical Training Center, Benton Harbor, MI 49022; 1970, 1974. 144 p. \$10.50. Post-secondary level.

17.31 SMALL ENGINE REPAIR, INTERNAL COMBUSTION/ 110 CURRICULUM

I-298 POWER TECHNOLOGY EDUCATION SYSTEM. Technical Systems, Inc., 2256 Terminal Rd., St. Paul, MN 55113; n.d. 20 p.

I-491 SMALL GASOLINE ENGINES IGNITION SYSTEM REPAIR. AN INDIVIDUAL INSTRUCTIONAL MANUAL. State Dept. of Education, Office of Vocational Education, Columbia, SC 29201, in cooperation with Clemson University, Vocational Education Media Center, Clemson, SC 29631; 1971. 51 p. \$1.50.

I-492 AN EVALUATION OF PROGRAMMED INSTRUCTIONAL MATERIALS IN TEACHING SMALL GASOLINE ENGINE IGNITION SYSTEM REPAIR. By George M. Reed, Jr., John H. Rodgers, and Robert H. White. South Carolina Research Coordinating Unit for Vocational Education, Clemson University, Clemson, SC, in cooperation with Office of Vocational Education, State Dept. of Education, Columbia, SC; 1971. 51 p. \$1.50.

I-762 A CURRICULUM GUIDE FOR SMALL ENGINES TECHNOLOGY. By Arthur Beaulieu, et al. State of Maine Dept. of Education, Bureau of Vocational Education, Augusta, ME 04330; 1974. 45 l. Secondary/post-secondary level.

I-945 LAWN MOWER REPAIRMAN. By Frank Ruhke, Linda Cheatum, and O.H. Majors. Orange County Development Program, 410 Woods Ave., Orlando, FL 32805; 1974. 1 v. (various pagings).

17.31 SMALL ENGINE REPAIR, INTERNAL COMBUSTION/ 350 OCCUPATION

I-586* AN ANALYSIS OF THE SMALL ENGINE REPAIR OCCUPATION. By Robert C. Salsbury and Charles R. Kline. Instructional Materials Laboratory, Trade and Industrial Education, Ohio State University, Columbus, OH 43210; 1974. 153 p.

17.31 SMALL ENGINE REPAIR, INTERNAL COMBUSTION/ 520 TESTS

I-761 PACER MARINE AND SMALL ENGINES. 1st ed. Oakland Schools, 2100 Pontiac Lake Rd., Pontiac, MI 48054; n.d. 25 l. Test booklet, no answers included.

17.35 UPHOLSTERING/ 080 COMMUNICATION

I-920 I-KNOW--A VOCABULARY GAME FOR THE UPHOLSTERY TRADE. By Clement O. Troth. Vocational-Technical Curriculum Laboratory, Rutgers-The State University Bldg. 4103-Kilmer Campus, New Brunswick, NJ 08903; 1976. 33 l. \$6.25.

17.35 UPHOLSTERING/ 320 LIBRARY MATERIALS

I-921 BIBLIOGRAPHY OF MATERIALS ON FURNITURE MAKING AND UPHOLSTERY. Library, Oklahoma State Dept. of Vocational and Technical Education, 1515 W. 6th Ave., Stillwater, OK 74074; 1974. 7 l. Free.

17.36 WOODWORKING/ 050 AUDIO-VISUAL MATERIALS AND METHODS

I-666 SAFETY IN THE WOOD SHOP. Shop safety series. Doubleday Multimedia; Box 11607, 1371 Reynolds Ave., Santa Ana, CA 92705; 1975. 1 35mm col. filmstrip, cassette tape. One of a set of six costing \$125.00. For others in the set, see Items I-664 (17.00 050), I-665 (17.03 050), I-667 (17.15 050), I-668 (17.23 050), I-669 (17.2302 050).

I-744 WOODWORKING BASICS: BASIC CONSTRUCTION DETAILS. DCA Educational Products, Inc., 4865 Stenton Ave., Philadelphia, PA 19144; 1975. 6 col. transparencies with overlays. \$27.30. CONTENTS: Box construction.-Basic furniture case construction.-Basic cabinet construction.-Adjustable shelving.-Drawer details.-Cabinet door details.

17.36 WOODWORKING/ 110 CURRICULUM

I-310 WOODS TECHNOLOGY 1-3: A GUIDE FOR TEACHERS. By Lyman Berg and Robert Nelson. Dept. of Elementary and Secondary Education, Div. of Curriculum and Instruction, Milwaukee Public Schools, 5225 W. Vliet St., Milwaukee, WI 53208; 1974. 84 p.

I-311 GENERAL WOODWORK: A WORKTEXT FOR THE FIRST YEAR OF WOODWORK. By Ralph J. Verpon. Stack-Vaughn Co., Austin, TX; 1968. 169 p. \$1.44. Includes test.

I-634 MAKING TOYS THROUGH TEAMWORK (AND) LEARNING ABOUT WOOD CONSTRUCTION: STUDENT RESOURCE BOOK FOR 'MAKING TOYS THROUGH TEAMWORK.' Center for Vocational Education, Ohio State University, 1960 Kenny Rd., Columbus, OH 43210; 1974. 84, 31 p. \$8.00.

I-635 THE GENERAL WOODWORKING CORE CURRICULUM: DEVELOPMENT AND EVALUATION OF AN EXPERIMENTAL CURRICULUM FOR THE NEW QUINCY (MASS.) VOCATIONAL-TECHNICAL SCHOOL. Project Able, 16th report. By Frank E. Leporini, Glen E. Neifing, and J. William Ulery. Quincy Public Schools, Quincy, MA; American Institutes for Research, Pittsburgh, PA; and US Office of Education, Bureau of Research, Washington, DC; 1970. 1 v. (various pagings). \$10.45.

1-745 INDUSTRIAL EDUCATION. Wood, L. Easy with Union High School District, 201. Pleasant High School, 1755 N. White Rd., San Jose, CA 95128, 1971. 10 p.

17.36 WOODWORKING 270 INSTRUCTION

1-551 TOOLS FOR WOODWORKING TRADES. By E. A. Grimes. University of Texas, Instructional Materials Services, Austin, TX. 1972. 270 p. 1975.

17.36 TRADE AND INDUSTRIAL OCCUPATIONS, OTHER/ 650 AUDIO-VISUAL MATERIALS, NO METHOD

1-947 CRAFTSMAN. Project 100M, IFL. By Mary Garmett. Florida Dept. of Education, Div. of Vocational, Technical and Adult Education, Tallahassee, FL. 32304, 1973. 11 p., 1 film filmstrip, script. Elementary level.

1-948 METEOROLOGY. Project 100M, IFL. By Berna A. Clinton. Florida Dept. of Education, Div. of Vocational, Technical and Adult Education, Tallahassee, FL. 32304, 1973. 10 p., 1 film filmstrip, script. Elementary level.

1-950 OCEANOGRAPHY. Project 100M, IFL. By Berna A. Clinton. Florida Dept. of Education, Div. of Vocational, Technical and Adult Education, Tallahassee, FL. 32304, 1973. 11 p., 1 film filmstrip, script. Elementary level.

1-951 SHIP FITTER. Project 100M, IFL. By Floyd James. Florida Dept. of Education, Div. of Vocational, Technical and Adult Education, Tallahassee, FL. 32304, 1973. 14 p., 1 film filmstrip, script. Elementary level.

1-952 SAIL MAKER. Project 100M, IFL. By Janet Rabe. Florida Dept. of Education, Div. of Vocational, Technical and Adult Education, Tallahassee, FL. 32304, 1973. 16 p., 1 film filmstrip, script. Elementary level.

17.99 TRADE AND INDUSTRIAL OCCUPATIONS, OTHER/ 110 CHEMISTRY

1-116 HYDRAULICS FOR TRACTORS AND INDUSTRIAL EQUIPMENT, VOLUME 1 AND VOLUME 2 (PRELIMINARY DRAFT). American Assoc. for Vocational Instructional Materials, Athens, GA. 30602, 1973. 148 p.

1-518 THE CHEMICAL TECHNOLOGY PROGRAM. ITS IN ADAPTATION, OPERATION AND EVALUATION. By Walter Brown. Vocational Technical Curriculum Laboratory, Rutgers The State University, Bldg. 6101 KILMER Campus, New Brunswick, NJ. 08903, 1972. 89 p. \$2.00.

1-526 ELEMENTS OF SUPPLYING. TECHNICAL MANUAL Headquarters, Dept. of the Army, Washington, DC. For sale by US Govt. Print. Off., Washington, DC. 20402, 1971. 100 p. \$3.20.

1-612 UNDERGROUND MINING, VOLUME 1. By Belmont County Joint Vocational School Mining Program. Detrick Printing, 911 City, PA. 1972. 48 p.

17.96 TRADE AND INDUSTRIAL OCCUPATIONS, OTHER/ 270 INSTRUCTION

1-119 EYE SAFETY DEVICES. EDUCATION LAW AND REGULATIONS OF THE COMMISSION OF EDUCATION. By William E. Miner. The University of the State of New York, The State Education Dept., Albany, NY. 12224, 1971. 8 p. Free.

1-524 READING THE CIVIL ENGINEER'S SCALE, POUCH DRAFT. North Central Technical Institute, 1000 S. 1st Ave., Wausau, WI. 54981, 1972. 15 p.

17.99 TRADE AND INDUSTRIAL OCCUPATIONS, OTHER/ 340 OCCUPATIONS

1-999 ENGINEER. Yellow pages Career Library. Margot Levy Gutman, Philadelphia; distributed by the Assoc. of Elementary School Principals, 1801 N. Arlington, VA. 22209, 1973. 6 p. \$2.00.

17.99 TRADE AND INDUSTRIAL OCCUPATIONS, OTHER/ 650 INSTRUCTION

1-651 APPROPRIATE WEATHER SERVICES. DATA ANALYSIS. SPECIALIST REPORT, OCCUPATIONAL FIELD NO. 15. Marine Corps, Office of Manpower Utilization, Marine Corps Base, Quantico, VA. 22131, 1973. 19 p. \$1.00.

17.99 TRADE AND INDUSTRIAL OCCUPATIONS, OTHER/ 670 CONCEPTS

1-952 COLLEGE PROGRAMS FOR PARAPROFESSIONALS: A DIRECTORY OF DEGREE GRANTING PROGRAMS IN THE HUMAN SERVICES. New Human Services Institute, General College New York. Human Sciences Press, 22 5th Ave., New York, NY. 10011, 1975. 145 p.

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DISADVANTAGED RELATED MATERIALS INDEX

The Index to Disadvantaged Materials represents an attempt to bring together all the Materials found in the Resource Materials Center's free loan collection which are related to educating disadvantaged persons. The definition of "Disadvantaged" used to identify materials in this list is necessarily a broad one. The term includes persons and groups who cannot compete or perform at levels normally required by educational agencies, employers, and society in general for a wide variety of reasons, social, cultural, economic, linguistic, and emotional. The term is not meant to include those with mental or physical handicaps.

Materials included in the listing cover a broad range of types--research studies, curriculum guides, games and simulations, education, low reading level, directories, resource and bilingual materials.

The materials are grouped under the heading of the subject area which they fall. The numbers on the left-hand side of the paired columns are the call numbers of individual items; the right-hand number refers to the page number of the bibliography on which the item is listed. For example, item D-476 appears on page 5 of the Distributive Education Bibliography. On referring to the Distributive Education bibliography, the user will find D-476 SUGGESTIONS FOR DISTRIBUTIVE EDUCATION PERSONNEL TO ASSIST BUSINESS IN DISADVANTAGED AREAS. Vocational-Technical Curriculum Laboratory, Rutgers--the State University, New Brunswick, NJ 08903; 1971. 28 p.

For effective use of this listing, it will be necessary for the user to have access to the complete set of bibliographies for 1976--"A"--Agriculture, "B"--Business, "C"--Career, "D"--Distributive, "H"--Home Economics, "M"--Health, and "I"--Trade and Industrial; and to the 1975 Edition of the "S"--Special Education Bibliography and the 1976 Supplement to the 1975 Special Education Bibliography. Complete sets of the bibliographies will be distributed to Wisconsin high schools and VTAE campuses. It will not be possible to use the Disadvantaged Related Materials Index with previous editions of the Resource Materials Center's bibliographies. The page numbers are keyed to the 1976 edition only. The exception is the 1975 edition of the Special Education Bibliography.

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I-930	32	S-66	8	S-989	8	S-1921	99
I-931	32	S-67	8	S-1081	64	S-1922	99
I-932	32	S-71	9	S-1123	17	S-1963	100
I-933	32	S-81	10	S-1126	23	S-2061	98
I-934	23	S-95	12	S-1127	24	S-2067	99
I-935	23	S-96	12	S-1140	67	S-2086	99
I-936	23	S-97	12	S-1141	67	S-2094	99
I-937	23	S-103	13	S-1142	68	S-2095	84
I-938	33	S-104	13	S-1143	67	S-2116	96
I-947	35	S-113	13	S-1144	68	S-2118	98
I-948	35	S-131	16	S-1145	68	S-2119	98
I-949	35	S-139	16	S-1146	68	S-2120	98
I-950	35	S-140	16	S-1147	68	S-2121	98
I-951	35	S-141	16	S-1159	48		
I-952	35	S-161	18	S-1244	68		
		S-164	18	S-1249	20		
		S-176	20	S-1251	20		
"M" NO.	PAGE	S-213	25	S-1253	14		
M-6	4	S-229	28	S-1259	68		
M-11	4	S-449	49	S-1275	67		
M-12	4	S-634	64	S-1276	68		
M-23	5	S-660	67	S-1309	68		
M-34	5	S-661	67	S-1317	11		
M-85	3	S-662	67	S-1326	8		
M-91	1						

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Merle Strong, Director
Roger Lambert, Associate Director

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